CISI
CHARTERED INSTITUTE FOR SECURITIES & INVESTMENT

Investment Operations Certificate

International Introduction to Securities & Investment

Edition 18, June 2025

CISI APPROVED WORKBOOK

Planting trees to catch carbon
20089900696
Printed on Carbon Captured paper

This workbook relates to syllabus version 18.0 and will cover exams from 10 September 2025 to 9 September 2026

Welcome to the Chartered Institute for Securities & Investment's International Introduction to Securities & Investment study material.

This workbook has been written to prepare you for the Chartered Institute for Securities & Investment's International Introduction to Securities & Investment examination.

Published by:
Chartered Institute for Securities & Investment
© Chartered Institute for Securities & Investment 2025
20 Fenchurch Street, London EC3M 3BY, United Kingdom

Tel: +44 20 7645 0600
Email: customersupport@cisi.org
Fax: +44 20 7645 0601
www.cisi.org/qualifications

Author:
JB Beckett

Reviewers:
Cindy Schuster
Kevin Rothwell, FCSI

This is an educational workbook only and the Chartered Institute for Securities & Investment accepts no responsibility for persons undertaking trading or investments in whatever form.

While every effort has been made to ensure its accuracy, no responsibility for loss occasioned to any person acting or refraining from action as a result of any material in this publication can be accepted by the publisher or authors.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission of the copyright owner.

Warning: any unauthorised act in relation to all or any part of the material in this publication may result in both a civil claim for damages and criminal prosecution.

Candidates should be aware that the laws mentioned in this workbook may not always apply to Scotland.

A learning map, which contains the full syllabus, appears at the end of this workbook. The syllabus can also be viewed on cisi.org and is also available by contacting the Customer Support Centre on +44 20 7645 0777. Please note that the examination is based upon the syllabus. Candidates are reminded to check the Candidate Update area details (cisi.org/candidateupdate) on a regular basis for updates as a result of industry change(s) that could affect their examination.

The questions contained in this workbook are designed as an aid to revision of different areas of the syllabus and to help you consolidate your learning chapter by chapter.

Please note that, as part of exam security, hand-held calculators are not allowed in CISI exam venues. Candidates must use the onscreen calculator for all CISI CBT exams in all languages in the UK and internationally.

Workbook version: 18.1 (June 2025)

Important – Keep Informed on Changes to this Workbook and Examination Dates

Changes in industry practice, economic conditions, legislation/regulations, technology and various other factors mean that practitioners must ensure that their knowledge is up to date. At the time of publication, the content of this workbook is approved as suitable for examinations taken during the period specified. However, changes affecting the industry may either prompt or postpone the publication of an updated version.

It should be noted that the current version of a workbook will always supersede the content of those issued previously. Keep informed on the publication of new workbooks and any changes to examination dates by regularly checking the CISI's website: cisi.org/candidateupdate

Learning and Professional Development with the CISI

The Chartered Institute for Securities & Investment is the leading professional body for those who work in, or aspire to work in, the investment sector, and we are passionately committed to enhancing knowledge, skills and integrity – the three pillars of professionalism at the heart of our Chartered body.

CISI examinations are used extensively by firms to meet the requirements of government regulators. Besides the regulators in the UK, where the CISI head office is based, CISI examinations are recognised by a wide range of governments and their regulators, from Singapore to Dubai and the US. Around 50,000 examinations are taken each year, and it is compulsory for candidates to use CISI learning workbooks to prepare for CISI examinations so that they have the best chance of success. Our workbooks are normally revised every year by experts, who themselves work in the industry, and also by our Accredited Training Partners, who offer training and elearning to help prepare candidates for the examinations. Information for candidates is also posted on a special area of our website: cisi.org/candidateupdate.

This workbook not only provides a thorough preparation for the examination it refers to, it is also a valuable desktop reference for practitioners, and studying from it counts towards your Continuing Professional Development (CPD). Mock examination papers, for most of our titles, will be made available on our website, as an additional revision tool.

CISI examination candidates are automatically registered, without additional charge, as student members for one year (should they not be members of the CISI already), and this enables you to use a vast range of online resources, including CISI TV, free of any additional charge. The CISI has more than 40,000 members, and nearly half of them have already completed relevant qualifications and transferred to a core membership grade. You will find more information about the next steps for this at the end of this workbook.

Introduction: The Financial Services Sector 1

The workbook commences with an introduction to the financial services sector and examines the role of the sector and the main participants that are seen in financial centres around the globe.

The Economic Environment 25

An appreciation of some key aspects of macroeconomics is essential to an understanding of the environment in which investment services are delivered. This chapter looks at some key measures of economic data and the role of central banks in management of the economy.

Equities/Stocks 49

The workbook then moves on to examine some of the main asset classes in detail, starting with equities. It begins with the features, benefits and risks of owning shares or stocks, looks at corporate actions and some of the main world stock markets and indices, and outlines the methods by which shares are traded and settled.

Bonds 81

A review of bonds follows which includes looking at the key characteristics and types of government and corporate bonds and the risks and returns associated with them.

Other Markets and Investments 107

This chapter starts the review of financial assets and markets by looking at the characteristics of cash deposits, the money markets, property and the foreign exchange markets.

Derivatives 125

Next there is a brief review of derivatives to provide an understanding of the key features of futures, options and swaps and the terminology associated with them.

Investment Funds 141

The workbook then turns to the major area of investment funds or mutual funds/ collective investment schemes. The chapter looks at open-ended and closed-ended funds, exchange-traded funds and hedge funds, and how they are traded.

8

Regulation and Ethics 163

An understanding of regulation is essential in today's investment industry. This chapter provides an overview of international regulation and looks at specific areas such as money laundering, insider trading and bribery, as well as a section on professional integrity and ethics.

9

Other Financial Products 179

The workbook concludes with a review of the other types of financial products, including loans, mortgages and protection products, including life assurance.

10

Financial Advice 197

The workbook concludes with a look at the main areas of financial advice, the financial advice process and the legal concepts.

Glossary

Multiple Choice Questions

Syllabus Learning Map

It is estimated that this workbook will require approximately 80 hours of study time.

What next?

See the back of this book for details of CISI membership.

Need more support to pass your exam?

See our section on Accredited Training Partners.

Want to leave feedback?

Please email your comments to learningresources@cisi.org

It's free

Before you open Chapter 1

We love a book! ...but don't forget you have been sent a link to an ebook, which gives you a range of tools to help you study for this qualification

Depending on the individual subject being studied and your device, your ebook may include features such as:

Watch video clips related to your syllabus

Read aloud function*

Adjustable text size allows you to read comfortably on any device*

Pop-up definitions

Highlight, bookmark and make annotations digitally*

Images, tables and animated graphs

Links to relevant websites

End of chapter questions and interactive multiple choice questions

* These features are device dependent. Please consult your manufacturers guidelines for compatibility

CISI
CHARTERED INSTITUTE FOR SECURITIES & INVESTMENT

Find out more at cisi.org/ebooks

"The use of online videos and voice functions allowed me to study at home and on the go, which helped me make more use of my time. I would recommend this as a study aid as it accommodates a variety of learning styles."

Billy Snowdon, Team Leader, Brewin Dolphin

Chapter One

Introduction: The Financial Services Sector

1. **Financial Services Sector** 3
2. **Financial Markets** 3
3. **Participants** 9
4. **Investment Distribution Channels** 17
5. **Environmental, Social and Governance (ESG)** 19

This syllabus area will provide approximately 3 of the 50 examination questions

1. Financial Services Sector

To help introduce this workbook, in this chapter, we will examine the role that the financial services sector undertakes within both the local economy and the global capital system. Within that system, financial services are becoming increasingly integrated and interdependent, just as trade and capital flows have become more global in nature.

With this in mind, it is important to understand the core role and the key features of the global financial services sector.

As part of the global capital system, the financial services sector provides a link between organisations and companies seeking capital and those with capital available for investment. For example, the capital might be provided by individuals saving for their retirement in a pension fund. It is the financial services sector that channels the money invested to those organisations that need it and provides execution, payment, advisory and management services.

This chapter looks at how the financial sector is structured and some of its key participants within.

2. Financial Markets

Learning Objective

1.1.2 Know the function of and differences between retail and professional/ commercial business and who the main customers are in each case

Within the financial services sector, two distinct areas can be found: wholesale and retail. The wholesale sector is also sometimes referred to as the professional sector or the institutional sector.

The activities that take place in wholesale financial markets are shown below and are expanded on in sections 2.1 to 2.8:

- **Equity markets** – the trading of quoted **shares**.
- **Bond markets** – the trading of government, supranational or corporate debt.
- **Foreign exchange** – the trading of currencies.
- **Derivatives** – the trading of **options**, **swaps**, **futures** and **forwards**.
- **Insurance markets** – major corporate insurance (including professional indemnity), reinsurance, captive insurance and risk-sharing insurance.
- **Commercial lending** – Commercial loans between corporations and financial institutions.
- **Private markets** – off-exchange investment in **equities**, **bonds** and real assets.
- **Digital markets** – trading of dematerialised digital property, including cryptocurrencies.

Other activities that take place in the wholesale sector include:

- **fund management** – managing the investment portfolios of collective investment schemes (CISs), pension funds and insurance funds
- **investment banking** – banking services tailored to organisations, such as undertaking mergers and acquisitions (M&A), equity trading, fixed-income trading and private equity, and
- **custodian banking** – provision of services to asset managers involving the safekeeping of assets, the administration of the underlying investments, settlement, corporate actions and other specialised activities.

By contrast, the retail sector focuses on services provided to personal customers:

- **Retail banking** – the traditional range of current accounts, deposit accounts, lending and credit cards.
- **Insurance** – the provision of a range of life assurance and protection solutions for areas such as medical, critical illness, motor, property, income and mortgage protection.
- **Pensions** – the provision of investment accounts specifically designed to allocate savings during a person's working life and provide benefits on retirement.
- **Investment services** – a range of investment products and vehicles ranging from execution-only stockbroking to full wealth management services and private banking.
- **Financial planning and financial advice** – helping individuals to understand and plan for their financial future.

2.1 Equity Markets

Equity markets, also known as stock markets, are a significant part of the global financial system. These markets serve as platforms for buying and selling ownership interests known as 'shares' or 'stocks' in publicly traded companies.

Equity markets enable companies to raise capital by selling shares to investors. Investors, in turn, become partial owners of the company and may benefit from potential profits through capital appreciation and **dividends**. Participants in equity markets include individual investors, institutional investors (such as insurance companies and pension funds), traders, and **market makers**. The collective actions of these participants determine share prices. Generally, share prices are influenced by various factors, including company performance, economic indicators, geopolitical events and investor sentiment. Supply and demand dynamics determine the value of shares in real time.

Equity markets operate on organised **exchanges**, such as the New York Stock Exchange (NYSE) or the **NASDAQ** in the US, the **London Stock Exchange (LSE)** in the UK and many others worldwide. Exchanges provide a regulated environment for buying and selling **securities**.

Benchmark indices, like the S&P 500, Dow Jones Industrial Average (DJIA), or FTSE 100, track the performance of a representative basket of shares. These indices provide insights into overall market trends and are used as performance benchmarks.

Equity markets serve several functions, including capital allocation, price discovery and liquidity provision. They facilitate the transfer of ownership in companies, allowing investors to buy and sell shares based on market demand.

Equity markets are subject to strict regulatory oversight to ensure fair and transparent trading. Regulatory bodies, such as the US Securities and Exchange Commission (SEC) or the Financial Conduct Authority (FCA) in the UK, establish rules and monitor market activities.

Technological advancements have transformed equity markets, with electronic trading platforms and algorithmic trading becoming prevalent. These innovations have increased efficiency and reduced transaction costs. Equity markets are globally interconnected, allowing investors to trade stocks listed on exchanges around the world. Globalisation has increased cross-border investments and created a more interconnected financial ecosystem.

Rivals to traditional stock exchanges have also arisen with the development of technology and communication networks known as **multilateral trading facilities (MTFs)**. MTFs are systems that bring together multiple parties that are interested in buying and selling financial instruments including shares, bonds and **derivatives**. These systems are also known as crossing networks or matching engines that are operated by an investment firm or another market operator.

We will look at equities and equity markets in more detail in chapter 3.

Source: World Federation of Exchanges (https://focus.world-exchanges.org/articles/market-capitalisation#:~:text=The%20definition%20of%20our%20indicators%20can%20be%20found,2021%20and%20a%204.8%25%20increase%20on%20Q3%202021.)

2.2 Bond Markets

In comparison to equity markets, bond markets – also known as fixed-income markets – represent the segment of the global financial system where debt instruments are bought and sold. Bond markets, therefore, provide a platform for the issuance and trading of debt securities. Governments, companies and other entities such as supranational agencies issue bonds to raise capital. Investors, seeking a combination of income and capital preservation, participate in bond markets.

The dynamics of bond markets are shaped by factors such as interest rates, economic conditions and credit risk, influencing the pricing and performance of bond instruments.

In this context, regulatory bodies, such as the International Capital Market Association (ICMA), play a crucial role in establishing guidelines and overseeing market activities to ensure fairness and transparency.

We will look at bonds in more detail in chapter 4.

2.3 Foreign Exchange (FX or Forex) Markets

Forex (foreign exchange or FX) markets facilitate the exchange of one currency for another, determining **exchange rates** that reflect the relative value of different currencies. Participants engage in forex trading for various purposes, including international trade, investment, speculation and risk management.

The diverse array of participants in forex markets includes **central banks**, commercial banks, institutional investors, companies and governments. Each brings unique motivations and perspectives, contributing to the **liquidity** and efficiency of the market.

Forex markets operate in a decentralised manner, with no central exchange. Instead, trading occurs electronically **over-the-counter (OTC)**, with a network of interconnected banks and financial institutions facilitating transactions 24 hours a day, five days a week. Currencies are traded in pairs, where one currency is exchanged for another. Major currency pairs, such as EUR/USD and USD/JPY, involve the most widely-used currencies, while minor and 'exotic' pairs involve currencies from smaller economies.

Exchange rates, the relative values of currencies, fluctuate based on supply and demand dynamics. Factors influencing exchange rates include economic indicators, geopolitical events, interest rates and market sentiment.

Forex markets are known for their high liquidity, allowing participants to buy and sell currencies with ease. Major currency pairs, characterised by significant trading volumes, offer tight bid-ask **spreads**, reducing transaction costs. Participants may engage in forex trading for speculative purposes, seeking to profit from currency price movements. Additionally, businesses and investors use forex markets for **hedging**, managing the risks associated with currency fluctuations.

Central banks may intervene in forex markets to stabilise or influence their domestic currencies. Such interventions can involve buying or selling currencies to achieve specific economic objectives.

Technological advancements have transformed forex trading, with electronic platforms providing real-time quotes, advanced charting tools and algorithmic trading capabilities. This has democratised access, allowing retail traders to participate alongside institutional players.

We will look at FX in more detail in chapter 5.

2.4 Derivatives Markets

Derivatives markets trade a range of complex products based on underlying instruments, including currencies, indices, interest rates, equities, **commodities** and credit risk. Futures and options are two of the most well-known derivatives.

Derivatives based on these underlying elements are available on both the exchange-traded market and the OTC market. An OTC market is where trading takes place directly between parties rather than on an exchange, and the trading of derivatives is increasingly moving from OTC to trading on-exchange. The largest of the exchange-traded derivatives markets is the Chicago Mercantile Exchange (CME), while Europe dominates trading in the OTC derivatives markets worldwide. Based on the value of the notional amounts outstanding, the OTC derivatives markets worldwide are about four times the size of stock quoted on stock exchanges.

Interest rate derivatives contracts account for the vast majority of outstanding derivatives contracts, mostly through interest rate swaps and foreign exchange derivatives. In terms of currencies, the interest rate derivatives market is dominated by the euro and the US dollar, which have accounted for most of the growth in this market since 2001. The growth in the market came about as a reaction to the 2000–02 stock market crash as traders sought to hedge their position against interest rate risk. The next largest segment is FX derivatives, which are used to speculate on currency movements and to hedge the risks of currency positions. Equity-linked contracts, credit derivatives and commodity contracts form the next major segments, and these are used to hedge against risk or for speculation.

We will look at derivatives in more detail in chapter 6.

2.5 Insurance Markets

Insurance markets specialise in the management of personal risk, corporate risk and protection of life events.

The market is led by a number of major players who dominate insurance activity in their sector or region; some of the largest are China Life, Allianz and AXA.

Another well-known organisation is Lloyd's (the world's specialist insurance market and historically referred to as Lloyd's of London); with a history dating back over 300 years, it is one of the largest insurance organisations in the world.

Lloyd's is not an insurance company but a marketplace that brings together a range of insurers, both individuals and companies, each of whom accepts insurance risks as a member of one or more underwriting syndicates. A small number of individual members (traditionally known as 'names') are liable to the full extent of their private wealth to meet their insurance commitments, while the majority are corporate entities which trade with limited liability. Corporate members include companies, limited liability partnerships and some specialist vehicles. Lloyd's names join together in syndicates and each syndicate will 'write insurance', ie, take on all, or part of, an insurance risk. There are many syndicates, and each name will belong to one or a number of these. Each syndicate hopes that **premiums** received will exceed claims paid out – in which case, each name will receive a share of the profits (after deducting administration expenses).

Lloyd's insures specialist and complex risks in casualty, property, energy, motor, aviation, marine and reinsurance. It has a reputation for innovation (eg, developing policies for aviation, burglary and cybercrime) and is known across the world as the place to bring unusual, specialist and complicated risks.

Less well known to the general public is the reinsurance industry. Just as individuals use insurance to protect against the risk of needing to make a claim, insurers protect themselves by using reinsurance companies. An insurer may seek to hedge some of the risks associated with the insurance policies it has written by laying off some of that risk with a reinsurer.

The reinsurance contract can cover an entire insurance portfolio or single risks; it may involve sharing all premiums and losses or just those exceeding a threshold, and it can also cover large one-off risks, such as major construction, satellites or large sporting events. Some of the largest reinsurers in the world are Munich Re, Swiss Re, Hannover Re, Berkshire Hathaway, and Lloyd's.

2.6 Commercial Lending

Commercial lending involves loan arrangements between businesses and financial institutions. The size of the global commercial lending market was valued at $9.7 trillion in 2023 and $10.68 trillion in 2024.[1] It is used to finance capital expenditures and operational costs that the company may otherwise be unable to afford. Costs of entry into a market and associated regulatory hurdles often prevent small businesses from having the necessary capital. Smaller companies typically lack direct access to bond and equity markets for financing. Borrowing may be used to support short-term funding needs for operational costs, the purchase of operational equipment, funding payrolls, or purchasing supplies used in production and manufacturing.

Commercial loans typically require the business to post collateral. This may take the form of property, plant or equipment that can be retrieved by the lender in the event of default or bankruptcy. In some instances, the cash flows generated from expected earnings (accounts receivable) are used as loan collateral. Consequently, smaller businesses can rely on various lending products, such as lines of credit, unsecured loans or term loans. These are described below.

- Lines of credit involve the borrower receiving a set credit limit, allowing them to borrow repeatedly up to the level of the agreed credit limit.
- Unsecured loans are typically non-revolving, and the borrower receives the funds and begins paying off the debt in periodic increments. The loan is not secured by collateral.
- Term loans are similar to unsecured loans but typically involve posting of collateral to provide security against default or bankruptcy and may require initial down payments upfront.
- Other forms of commercial lending include short-duration loans, mortgages issued to commercial real estate companies, and renewable loans that can be extended indefinitely.

2.7 Private Markets (Alternatives)

In addition to markets traded on-exchange, like bonds and equities, other assets are invested off-exchange and traded over-the-counter (OTC). Also known as **alternatives**, the private market includes private equity, private credit/debt, and real assets such as property, antiques and collectibles. Assets under management (AUM) in private markets totalled $11.7 trillion in 2022, up from $10 trillion in 2021 and $7.4 trillion in 2020, and is projected to reach more than $15 trillion by 2025 and more than $18 trillion by 2027[2].

2.8 Digital Finance (Including Crypto)

The markets above form the great majority of financial services. Yet the fastest growing market today is that of digital property including **tokenisation** (Crypto). Whilst the efficacy of the economic and investment attributes of crypto remain debated, what is undeniable is the rapid rise of crypto globally, led by the largest **cryptocurrency** Bitcoin. Its rise marks the rise of new alternative markets trading digital properties without physical underlying, and not traded in traditional markets.

1 Commercial Lending Market Share, Size & Growth Report | 2032 (https://www.skyquestt.com/report/commercial-lending-market#:~:text=Global%20Commercial%20Lending%20Market%20size%20was%20valued%20at,CAGR%20of%2010.1%25%20during%20the%20forecast%20period%20%282025-2032%29.)

2 Private Markets | S&P Global (https://www.spglobal.com/en/research-insights/market-insights/private-markets)

The dollar value of a single Bitcoin token surpassed $100,000 in December 2024. The value of the entire Bitcoin market is now in excess of $2 trillion, making it one of the world's most expensive traded properties. In more recent years, we are now witnessing the integration of crypto into traditional finance such as through ETFs, mutual funds, derivatives and pensions.

3. Participants

Learning Objective

1.1.1 Know the role of the following within the financial services sector: retail/commercial banks; savings institutions; investment banks; private banks; pension funds; insurance companies; fund managers; stockbrokers; custodians; platforms; third-party administrators (TPAs); industry trade and professional bodies; sovereign wealth funds; peer-to-peer/crowdfunding

The number of organisations operating in the financial services sector is wide and varied. Each carries out a specialised function, and an understanding of their roles is important in order to understand how the sector is organised and how participants interact.

Although each participant is described as a separate organisation in the following sections, the nature of financial conglomerates means that some of the largest global firms may have divisions carrying out each of these activities.

3.1 Investment Banks

Investment banks provide advice and arrange finance for companies that want to float on the stock market, raise additional finance by issuing further shares or bonds, or carry out mergers and acquisitions. They also provide services for institutional firms that might want to invest in shares and bonds, in particular pension funds and asset managers.

Typically, an investment banking group provides some or all of the following services:

- Finance-raising and advisory work, both for governments and for companies. For corporate clients, this is normally in connection with new issues of securities to raise capital, as well as giving advice on mergers and acquisitions.
- Securities-trading in equities, bonds and derivatives and the provision of broking and distribution facilities.
- Treasury dealing for corporate clients in currencies, including 'financial engineering' services to protect them from interest rate and exchange rate fluctuations.
- Investment management for sizeable investors, such as corporate pension funds, charities and very wealthy private clients. In the larger investment banks, the value of funds under management runs into many billions of dollars.

Only a small number of investment banks provide services in all these areas. Most others tend to specialise to some degree and concentrate on only a few product lines. A number of banks have diversified their range of activities by developing businesses such as proprietary trading, servicing hedge funds, or making private equity investments.

3.2 Custodians

Custodians are banks that specialise in safe custody services, looking after investments such as shares and bonds on behalf of others, such as **fund managers**, pension funds and insurance companies. Activities they undertake include the following:

- Holding assets in safekeeping, such as equities and bonds.
- Arranging settlement of any purchases and sales of securities.
- Asset servicing – collecting income from assets, namely dividends in the case of equities and interest in the case of bonds, and processing corporate actions.
- Providing information on the underlying companies and their **annual general meetings (AGMs)**.
- Managing cash transactions.
- Performing FX transactions when required.
- Providing regular reporting on all activities undertaken that affect the holdings in a portfolio, including all trades, corporate actions and other transactions.

Cost pressures have driven down the charges that a custodian can make for its traditional custody services and have resulted in consolidation within the industry. The custody business is now dominated by a small number of global custodians who are often divisions of major banks. Among the biggest global custodians are the Bank of New York Mellon (BNY Mellon) and State Street.

Generally, they also offer other services to their clients, such as stock lending, measuring the performance of the portfolios of which they have custody and maximising the return on any surplus cash.

3.3 Retail/Commercial Banks

Retail/commercial banks are known by different names in different countries. They are the financial institutions that provide services, such as taking deposits from, and lending funds to, retail customers, as well as providing payment and money transmission services. They may also provide similar services to business customers.

Historically, these banks have tended to operate through a network of branches with physical locations, but increasingly they operate through telephone and internet-based services. As well as providing traditional banking services, larger **retail banks** also offer other financial products, such as investments, pensions and insurance. Banks that offer multiple services such as this are known as 'financial conglomerates'. The Bank for International Settlements (BIS) defines a financial conglomerate as:

> '*any group of companies under common control whose exclusive or predominant activities consist of providing significant services in at least two different financial sectors (banking, securities, insurance)*'.

More recently, competition to traditional banks has emerged from 'challenger' banks. These are smaller banks, specialising in areas underserved by large, traditional banks, which distinguish themselves from historic banking by deploying modern financial technology with no community branches.

3.4 Savings Institutions

As well as retail banks, most countries also have savings institutions that started off by specialising in offering savings products to retail customers, but now tend to offer a similar range of services to those offered by banks.

They are known by different names around the world, such as *cajas* in Spanish-speaking countries, credit unions in North America and building societies in Australia and the UK. They are typically jointly owned by the individuals that have deposited or borrowed money from them – the members. It is for this reason that such savings organisations are often described as 'mutual societies' or 'mutual savings banks'.

Over the years, many savings institutions have merged or been taken over by larger ones. More recently, a number have transformed themselves into banks that are quoted on stock exchanges – a process known as demutualisation.

3.5 Peer-to-Peer (P2P) Lending and Crowdfunding

A more recent development in the banking sector has been the emergence of competitors to the traditional role of banks in the form of peer-to-peer lenders and crowdfunding.

P2P Lending

In the traditional banking model, banks take in deposits on which they pay interest and then lend out at a higher rate; the spread between the two is where they earn their profit. Peer-to-peer (P2P) lending cuts out the banks so that borrowers often receive slightly lower rates, while savers get far improved headline rates, with the P2P firms themselves profiting via a fee.

In exchange for accepting greater risk, savers can earn higher returns. Available rates vary depending on the type of borrower that the P2P site lends to and the risk the lender is prepared to accept. The deposit is lent out to individuals and businesses, but it may take time before all of a large deposit is lent and interest is earned. No interest is paid while it is waiting to be lent out. Immediate withdrawals are not always possible and, where they are, may take time and incur a charge or a reduced interest rate. Most of these loans are unsecured, meaning that they are not backed by any collateral in the event of default.

Crowdfunding

Crowdfunding is the practice of funding a project or venture by raising small amounts of money from a large number of people. Traditionally, financing a business, project or venture involved asking a bank or a few people for large sums of money. Crowdfunding switches this idea around, using the internet to access many potential funders.

Crowdfunding can take the following forms:

- **A donation** – people simply believe in the cause.
- **Debt crowdfunding** – investors essentially lend their money, then receive it back with interest.
- **Equity crowdfunding** – people invest in exchange for equity or shares in the venture.

In terms of equity crowdfunding, it usually involves a start-up seeking funding from a large number of people. Some start-ups may even seek to convert their fans and customers into investors in order to enhance brand loyalty. To the founder, one advantage of having a large number of funders instead of one or a few key investors is that large investors may have different ideas and seek to influence how the business is run. Having a diverse source of funding may help to diffuse pressure from such investors. Moreover, small investors can be turned into brand ambassadors for the company.

3.6 Insurance Companies

As mentioned above, one of the key functions of the financial services sector is to allow risks to be managed effectively.

Protection planning is a key area of financial advice, and the insurance industry provides a variety of products to meet many potential scenarios. These products range from payment protection policies, designed to pay out in the event that an individual is unable to meet repayments on loans and mortgages, to fleet insurance against the risk of an airline's planes crashing.

Insurance companies collect premiums in exchange for the coverage provided. This premium income is invested in equities and bonds and, as a result, the insurance industry is a major investor in both equity and bond markets. Insurance companies will also hold a large amount of cash to be able to satisfy any claims that may arise on the various policies and, if required, will liquidate investment holdings.

3.7 Pension Funds

Retirement schemes (or pension funds) are one of the key methods by which individuals can make provision for their retirement needs. The global pension funds market was valued at $64.1 trillion in 2022, and is projected to reach $109.1 trillion by 2032, growing annually at 5.5%. There are a variety of retirement schemes available ranging from those provided by employers, sovereign and state-backed funds, to self-directed schemes. Major pension markets include the following[3]:

- The US Pension Funds Market size in terms of AUM value is forecasted to grow from $6.14 trillion in 2024 to $9.40 trillion by 2029, growing annually at 8.90%[4]. Retirement assets made up 30% of all financial assets owned by households in the US. Total US retirement assets were estimated at $33.6 trillion in 2022, individual retirement accounts (IRAs) holding the most retirement assets, at 34% of the total.
- The total market value of Canadian trusteed pension funds rose to nearly $2.2 trillion in the first quarter of 2023[5]. Over 6.7 million Canadians were active members of a registered pension plan (RPP) in 2021. Over two-thirds (68.0%) of members were covered by a defined benefit plan.
- The Australian super system has grown the most relative to GDP in the past ten years, coming in as the world's fifth-largest pension system in 2023. Australian funds had an estimated US$2.4 trillion ($3.7 trillion) in assets[6].

3 Pension Funds Market Size – Share, Trends, Growth | 2032 (https://www.alliedmarketresearch.com/pension-funds-market-A241404#:~:text=The%20global%20pension%20funds%20market%20was%20valued%20at,a%20CAGR%20of%205.5%25%20from%202023%20to%202032.)

4 https://www.mordorintelligence.com/industry-reports/us-pension-funds-market

5 https://www.statcan.gc.ca/o1/en/plus/4494-pensions-snapshot-fund-values-payouts-and-memberships#:~:text=According%20to%20new%20data%20released%20today%2C%20the%20total,of%20%244-0.9%20billion%20%28%2B1.9%25%29%20from%20the%20previous%20quarter.

6 Australia tops charts for pension assets-to-GDP growth ratio – Investment Magazine (https://www.investmentmagazine.com.au/2024/02/australia-tops-charts-for-pension-assets-to-gdp-growth-ratio/)

- The UK is considered the third largest pension market globally. The overall size of the UK pension market varies depending on source. For example, the ONS stated that the total private pension wealth in Great Britain was £6.1 trillion in March 2018 (making up 42% of the UK's total wealth), up from £3.6 trillion (34% of total wealth) in June 2008[7]. Whereas other sources suggest the size of the sector is closer to £3 trillion.

Traditionally, company pension schemes provided an amount based on the employee's final salary and number of years of service. Most companies today offer new staff defined contribution (DC) schemes in which the firm and, in most cases, the employee contribute to an investment pot. At retirement, the accumulated fund is used to provide a pension.

Many individuals are not members of company schemes and instead provide for their retirement through their own personal retirement schemes (self-directed schemes).

3.8 Fund Managers

Fund managers, also known as investment managers, portfolio managers or asset managers, run portfolios of investments for others. Some are organisations that focus solely on this activity; others are divisions of larger entities, such as insurance companies or banks. Fund management is also known as asset management.

Investment managers will buy and sell shares, bonds and other assets in order to increase the value of their clients' portfolios. They can be subdivided into institutional and private client fund managers. Institutional fund managers work on behalf of institutions, for example, investing money for a company's pension fund or an insurance company's fund, or managing the investments of a mutual fund. Private client managers invest the money of individuals. Obviously, institutional portfolios tend to be larger than those of regular private clients.

Fund managers charge their clients for managing their money. Their charges are often based on a small percentage of the value of the fund being managed and may also have charges linked to the performance achieved. Generally, brokerage costs tend to be reduced for larger volume trades.

Other areas of asset management include running hedge funds and the provision of investment management services to institutional entities, such as charities and local government authorities.

3.9 Stockbrokers and Wealth Managers

Stockbrokers arrange stock market trades on behalf of their clients, who are investment institutions, fund managers or private investors. They may advise investors about which shares, funds or bonds they should buy or, alternatively, they may offer execution-only services, when the broker executes a trade on a client's instruction without providing advice. Many stockbrokers now offer wealth management services to their clients and so are also referred to as wealth managers.

7 Pension wealth in Great Britain – Office for National Statistics (https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/bulletins/pensionwealthingreatbritain/april2016tomarch2018)

The services offered by stockbrokers and wealth managers can be divided into four main categories:

- **Execution-only stockbrokers** – these offer telephone or internet-based trade execution and settlement for retail clients. No advice is offered and commission is charged per trade. They are aimed at day traders and investors who are confident in making their own investment decisions and, typically, investors with small portfolios.
- **Robo-advisers** – a robo-adviser is an online wealth management service that provides automated, algorithm-based portfolio management advice without the use of human financial planners. The robo-adviser typically charges a monthly or annual fee based on the size of the portfolio (amount of assets under management).
- **Advisory and discretionary wealth managers** – these offer a wealth management service to private investors – either advice only or a fully managed (discretionary) service. Their target market ranges from mass affluent to high-net-worth clients with large portfolios and they charge fees for management of the portfolio based on the value of the portfolio.
- **Institutional brokers** – these are stockbrokers who arrange trades on behalf of large institutions. Their skill lies in their ability to execute what are typically large trades in the market without having a significant adverse effect on the share price. This may involve breaking up a large order into smaller trades and executing them through a variety of different trading venues so as to minimise their impact on the market. Institutional brokers usually charge basis point fees per trade.

Like fund managers, stockbrokers and wealth managers can also look after client assets and charge custody and portfolio management fees.

Stockbrokers also advise investors about which shares, bonds or funds they should buy. As a result, the traditional distinction between the two has blurred and is rapidly disappearing. These wealth management firms can be independent companies, but some are divisions of larger entities, such as investment or commercial banks. They earn their profits by charging fees for their advice and commissions on transactions.

3.10 Platforms

Platforms, sometimes known as fund supermarkets, are online services used by intermediaries, such as independent financial advisers (IFAs), to view and administer their clients' investment portfolios.

They offer a range of tools which allow advisers to see and analyse a client's overall portfolio and to choose products for them. As well as providing facilities for investments to be bought and sold, platforms generally arrange custody for clients' assets. UK examples of platforms include those offered by Cofunds, Nucleus, Transact, AJ Bell, and Hargreaves Lansdown. In the US, the largest investment platforms include Charles Schwab, Vanguard, Fidelity, Bank of America and JP Morgan.

Over the last ten years, we can also observe the growth of DIY platforms. The global online investment platform market size was valued at $1.88 billion in 2021[8] and is expected to expand at a compound annual growth rate (CAGR) of 13.9% from 2022–30. The increasing popularity of cryptocurrency, as well as growing online investors across the world, are expected to drive the growth of the industry. Furthermore, the introduction of peer-to-peer (P2P) payments in online investment applications will also grow the online platform market.

8 Online Investment Platform Market Size, Share Report, 2030 (https://www.grandviewresearch.com/industry-analysis/online-investment-platform-market-report#:~:text=The%20global%20online%20investment%20platform%20market%20size%20was,rate%20%28CAGR%29%20of%2013.9%25%20from%202022%20to%202030.)

Platforms tend to offer wide ranges of mutual funds, but also 'wraps' such as pension plans and insurance bonds. Wrap accounts enable advisers to take a holistic view of the various assets that a client has in a variety of accounts. Advisers also benefit from using wrap accounts to simplify and bring some level of automation to their back office using internet technology.

Platform providers also make their services available directly to investors, and platforms earn their income by charging for their services.

3.11 Private Banks

Private banks provide a wide range of services for their clients, including wealth management, estate planning, tax planning, insurance, lending and lines of credit. Their services are normally targeted at clients with a certain minimum sum of investable cash or minimum net worth. These clients are generally referred to as high-net-worth individuals (HNWIs), or ultra-high-net-worth individuals (UHNWIs) for the most wealthy.

Private banking is offered both by domestic banks and by those operating 'offshore'. In this context, offshore banking means banking in a jurisdiction different from the client's home country – usually one with a favourable tax regime. For example, the Swiss private banking market is one of the most popular and a multi-trillion business.

The private banking market is relatively fragmented, with a small number of very large global players like UBS, JP Morgan and Citigroup, but many more medium-sized and small players. Competition in private banking has expanded in recent years as the number of banks providing private banking services has increased dramatically.

The distinction between private and retail banks is gradually diminishing as private banks reduce their investment thresholds in order to compete for this market. Meanwhile, many high street banks are also expanding their services to attract the 'mass affluent' and HNWIs.

3.12 Sovereign Wealth Funds (SWFs)

A sovereign wealth fund (SWF) is a state-owned investment fund that holds financial assets such as equities, bonds, real estate, or other financial instruments. Examples of SWFs include the Norway Government Pension Fund, Abu Dhabi Investment Authority, SAMA Foreign Holdings of Saudi Arabia and China Investment Corporation.

SWFs are defined as special purpose investment funds or arrangements owned by a government. Their key characteristics are as follows:

- They hold, manage, or administer assets to achieve financial objectives.
- They employ a set of investment strategies which include investing in foreign financial assets.
- The assets of an SWF are commonly established out of **balance of payments** surpluses, official foreign currency operations, the proceeds of privatisations, fiscal surpluses, and receipts resulting from commodity exports.

SWFs have emerged as major investors in the global markets over the last ten years, but they date back many decades.

SWFs have colossal funds under management, and they managed a total of $13.2 trillion of assets in 2023, up 14% on the previous year[9]. Norway's Government Pension Fund Global was the largest asset pool ($1.8 trillion); the China Investment Corporation (CIC) and the State Administration of Foreign Exchange (SAFE) were ranked second and third for the second year running (CIC $1.3 trillion and SAFE $1.1 trillion). These were followed by Middle Eastern funds, with the Abu Dhabi Investment Authority registering around $993 billion in size, Saudi Arabia's Public Investment Fund (PIF) at $978 billion, and the assets of the Kuwait Investment Authority (KIA) estimated at $969 billion.

SWFs are private investment vehicles that have varied and undisclosed investment objectives. Typically, their primary focus is on well-above-average returns from investments made abroad. Their size and global **diversification** allows them to participate in the best opportunities, spread their risks and, by diverting their funds overseas, stabilise their local economies. They may also use part of their wealth as reserve capital for when their countries' natural resources are depleted.

SWFs are becoming increasingly important in the international monetary and financial system, attracting growing attention. This growth has also raised several issues:

- Official and private commentators have expressed concerns about the transparency of SWFs, including their size and their investment strategies, and that SWF investments may be affected by political objectives.
- There are also concerns about how their investments might affect recipient countries, leading to talk about protectionist restrictions on their investments, which could hamper the international flow of capital.

In response to these concerns, the International Forum of Sovereign Wealth Funds (IFSWF) has been formed and has published a set of 24 voluntary principles, the Generally Accepted Principles and Practices (GAPP) for SWFs, known as the Santiago Principles. This is leading to increasing transparency, with a number of countries now publishing annual reports and disclosing their assets under management.

3.13 Industry Trade and Professional Bodies

The investment industry is a dynamic, rapidly changing business, and one that requires cooperation between firms; this ensures that the views of various industry sectors are represented, especially to governments and regulators, and that cross-firm developments can take place to create an efficient market in which those firms can operate.

This is the role of the numerous trade bodies that exist across the world's financial markets. Examples of these that operate globally are the International Capital Market Association (ICMA), which concentrates on international bond dealing, and the International Swaps and Derivatives Association (ISDA), which produces standards that firms that operate in OTC derivatives follow when dealing with each other.

9 IE University and ICEX present 2024 Sovereign Wealth Funds Report (https://www.ie.edu/university/news-events/news/sovereign-wealth-funds-managed-total-132-trillion-assets-2023-14-previous-year-according-report-ie-university-icex-invest-spain/#:~:text=Sovereign%20wealth%20funds%20%28SWFs%29%20grew%20by%2014%25%20to,IE%20University%20in%20partnership%20with%20ICEX-Invest%20in%20Spain.)

3.14 Third-Party Administrators (TPAs)

Third-party administrators (TPAs) undertake investment administration on behalf of other firms and specialise in this area of the investment industry.

The number of firms, and the scale of their operations, has grown with the increasing use of outsourcing by firms. The rationale behind outsourcing has been that it enables a firm to focus on the core areas of its business (for example, investment management and stock selection, or the provision of appropriate financial planning) and leave another firm to carry on the administrative functions which it can process more efficiently. Note that ultimate responsibility remains with the outsourcing firm.

4. Investment Distribution Channels

Learning Objective

1.1.3 Know the role of investment distribution channels including: independent and restricted advice; execution only

1.1.4 Know the impact of fintech on financial markets, including robo advice and peer to peer crowdfunding

4.1 Financial Planning

Financial planning is a professional service available to individuals, their families and businesses, who need objective assistance in organising their financial affairs to achieve their financial and life style objectives more easily.

Financial planning is clearly about financial matters, so it deals with money and assets that have monetary value. Invariably this will involve looking at the current value of clients' bank balances, any loans, investments and other assets. It is also about planning, ie, defining, quantifying and qualifying goals and objectives and then working out how those goals and objectives can be achieved. In order to do this, it is vital that a client's current financial status is known in detail.

Financial planning is ultimately about meeting a client's financial and life style objectives, not the adviser's objectives. Any advice should be relevant to the goals and objectives agreed. Financial planning plays a significant role in helping individuals get the most out of their money. Careful planning can help individuals define their goals and objectives, and work out how these may be achieved in the future using the available resources. Financial planning can look at all aspects of an individual's financial situation and may include tax planning, both during their lifetime and on death, asset management, debt management, retirement planning and personal risk management – protecting income and capital in the event of illness and providing for dependants on death.

The Chartered Institute for Securities & Investment (CISI) offers qualifications and related products at all levels for those working in, or looking for a career in, financial planning. Further details can be found on the CISI's website (www.cisi.org).

4.2 Independent versus Restricted Advice

Investment firms describe their services as either independent advice or restricted advice. Firms that describe their advice as independent must ensure that they genuinely do make their recommendations based on comprehensive and fair analysis of all products available in the market, and provide unbiased, unrestricted advice. If a firm chooses to only give advice on its own range of products – restricted advice – this must be made clear to customers.

4.3 Execution Only

Execution-only services occur when a customer instructs a financial firm to buy or sell a specific investment product without seeking prior advice from the firm. In essence, the customer independently decides on the investment without the firm's advisory input.

Crucially, in execution-only transactions, the client bears the responsibility for assessing the suitability of the chosen investment product. Unlike advised services where the firm provides guidance, an execution-only transaction puts the onus on the client to make an informed decision regarding the product's suitability based on their own understanding and risk tolerance.

The practice of execution-only sales is long-established. To ensure that firms operate within regulatory guidelines, they need to record and retain evidence, in writing, that the firm:

- gave no advice, and
- made it clear, at the time of the sale, that it was not responsible for assessing the product's suitability.

By clearly communicating that no advice is being provided during the transaction, the firm ensures that customers are aware that the firm's role is limited to executing the trade and does not involve offering guidance or recommendations. Also, by explicitly stating that the firm is not responsible for assessing the suitability of the chosen investment product, the firm is able to manage customer expectations and safeguard against misunderstandings regarding the nature of the service.

Financial firms engaging in execution-only services must maintain thorough documentation. This includes written evidence that the firm provided no advice and made it explicitly clear that it was not responsible for assessing the product's suitability. This record-keeping is a vital aspect of compliance, ensuring transparency and accountability in the event of regulatory scrutiny.

4.4 Fintech, Robo-Advice and Crowdfunding

Technology is embedded in everything we do, changing the way we live, work and experience the world. Advances in technology have radically altered how we use the internet and communicate which, in turn, is disrupting traditional industries.

Financial technology, known as Fintech, is impacting on the traditional banking and wealth management industry and, therefore, requires the development of new digital services and platforms across a range of financial institutions. People are becoming more digitally proficient, and they desire constant access to sophisticated tools and services, with clients of financial services firms being no different.

Challenger banks, P2P lending and robo-advice are challenging the long-established provision of banking and investment services. Technological developments in communications are also changing the face of the industry. Today, as the use of apps and artificial intelligence (AI) recommendations from providers are increasing, customers are demanding the same range of digital capabilities that they have become used to for other products and services. As an example, China's fund management industry has gone from fledgling asset management to global pioneer in a short number of years in terms of how fund purchases take place. In 2012, only a handful of investors made fund purchases online but, according to a survey by the Asset Management Association of China, more than two-thirds of investors now subscribe to funds via mobile phone apps.

Robo-advice is the application of technology to the process of providing financial advice, but without the involvement of a financial adviser. A prospective investor enters data and financial information about themselves, and the system then uses an algorithm to score the information and decide what investments should be chosen. The system then presents the investment strategy, which is usually passively focused around index funds or exchange-traded funds (ETFs), and allows easy implementation.

Robo-advice can be fully automated or provide guidance and tools to enable investors to choose their own solutions. The approach uses an asset-and-risk model, as well as the construction of risk-targeted portfolios or funds to achieve a client's objectives, and then the ongoing monitoring and rebalancing against those objectives. Robo-advice is already well established in the US, with some of the industry's largest players involved.

5. Environmental, Social and Governance (ESG)

Learning Objective

1.1.5 Understand the approaches to Environmental, Social and Governance (ESG) investment, and their advantages and disadvantages

5.1 Environmental, Social and Governance (ESG) Investing

The rise of environmental concerns, increasing focus on better corporate governance and shareholder rights, and the emergence of a more conscious investor, has contributed to the development of ESG, which has become an embedded process within the financial sector. The term first became mainstream in a 2004 report from the United Nations and World Bank, '*Who Cares Wins*'[10]. ESG factors are used by firms to manage the business, processes and investments offered. ESG can be broken down into the following:

- **Environmental factors** and concerns include sustainability and climate change.
- **Social factors** and concerns include consumer protection and diversity.
- **Governance factors** and concerns include employee relations and management structures.

10 Who cares wins: connecting financial markets to a changing world (https://documents.worldbank.org/en/publication/documents-reports/documentdetail/280911488968799581/who-cares-wins-connecting-financial-markets-to-a-changing-world)

By 2023, the ESG movement had grown from a UN corporate social responsibility initiative into global integration of more than US$30 trillion in assets under management (AUM). The key initiatives relating to ESG are indicated below.

Principles for Responsible Investment (PRI)

The six Principles for Responsible Investment (PRI)[11] offer industry guidance for incorporating ESG issues into investment practice. In 2005, UN Secretary-General, Kofi Annan, invited a group of the world's largest institutional investors to join a process to develop the Principles for Responsible Investment. An investor group representing institutions from 12 countries was supported by a 70-person group of experts from the investment industry, intergovernmental organisations and civil society. The Principles were launched in April 2006 at the New York Stock Exchange (NYSE). Signatory AUM reached US$128.4 trillion[12]. The Principles are as follows:

- **Principle 1** – we will incorporate ESG issues into investment analysis and decision-making processes.
- **Principle 2** – we will be active owners and incorporate ESG issues into our ownership policies and practices.
- **Principle 3** – we will seek appropriate disclosure on ESG issues by the entities in which we invest.
- **Principle 4** – we will promote acceptance and implementation of the Principles within the investment industry.
- **Principle 5** – we will work together to enhance our effectiveness in implementing the Principles.
- **Principle 6** – we will each report on our activities and progress towards implementing the Principles.

US

ESG adoption in the US is often primarily state rather than federal led with varying state laws and federal guidelines. The current state of ESG regulation in the US is fractured with various states moving in opposite directions, and some states embracing ESG measures, while others enact anti-ESG legislation. At the federal level, the Securities and Exchange Commission (SEC) has introduced regulations[13] to enhance transparency and accountability in corporate ESG disclosures. In 2022, the SEC introduced a proposed rule for enhanced disclosure of ESG metrics, aiming to standardise how companies report their climate-related risks and impacts, combat **greenwashing** practices and ensure that companies' sustainability claims are backed by demonstrable activity. At the time of writing (January 2025), the incoming Republican administration has signaled a large federal policy U-turn on ESG, and a number of state-level legal challenges are already underway.

11 What are the Principles for Responsible Investment? | PRI Web Page | PRI (https://www.unpri.org/about-us/what-are-the-principles-for-responsible-investment)
12 Annual report 2024 (https://www.unpri.org/)
13 SEC.gov | SEC Adopts Rules to Enhance and Standardize Climate-Related Disclosures for Investors (https://www.sec.gov/newsroom/press-releases/2024-31)

European Union

The EU has put in place a transparency framework, the Sustainable Finance Disclosure Regulation (SFDR). The SFDR was designed to allow investors to properly assess how sustainability risks are integrated in the investment decision process. The Sustainable Finance Disclosures Regulation (SFDR)[14] started applying in March 2021 and:

- requires financial market participants (FMPs) and financial advisers to disclose at entity and product level how they integrate sustainability risks in their investment decision-making processes
- introduces additional product disclosures for financial products making sustainability claims
- provides transparency to investors about the sustainability risks that can affect the value of their investments and about the adverse impacts such investments have on the environment and society, and
- strengthens investor protection, making it easier for investors to compare financial products and services based on sustainability claims with a view to guiding their investment decisions.

The UK Sustainability Disclosure Requirements (SDR)

The UK Sustainability Disclosure Requirements (SDR)[15] is a UK-specific regulation set out by the Financial Conduct Authority's (FCA's) SDR and Investment Labels Policy Statement. The regulation is comprised of three key ESG and sustainable investing objectives: regulate sustainability labels marketed for products and funds, set guidance for product and firm level disclosure and address greenwashing.

Task Force on Climate-related Financial Disclosures (TCFD)

The Task Force on Climate-related Financial Disclosures (TCFD)[16] was created to address issues stemming from the 2015 Paris Agreement, by the Financial Stability Board (FSB). Under the chairmanship of Michael Bloomberg, the Task Force published recommendations designed to standardise worldwide climate-related disclosures that could:

> *'promote more informed investment... and in turn, enable stakeholders to understand better concentrations of carbon-related assets in the financial sectors'.*

Following the release of its status report on 12 October 2023, the TCFD was deemed to have 'fulfilled its remit and disbanded'. The FSB has asked the IFRS Foundation[17] to provide monitoring of the progress of companies' climate-related disclosures.

IFRS Sustainability Disclosure Standards

The IFRS Sustainability Disclosure Standards are developed by the International Sustainability Standards Board (ISSB). The ISSB is the standard-setting body within the IFRS Foundation. Companies then applying IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information and IFRS S2 Climate-related Disclosures will need to meet the TCFD recommendations[18] as part of the ISSB Standards.

14 Summary report of the open and targeted consultations on the implementation of the Sustainable Finance Disclosures Regulation (SFDR) (https://finance.ec.europa.eu/document/download/0f2cfde1-12b0-4860-b548-0393ac5b592b_en?filename=2023-sfdr-implementation-summary-of-responses_en.pdf)

15 Sustainability disclosure and labelling regime | FCA (https://www.fca.org.uk/firms/climate-change-and-sustainable-finance/sustainability-disclosure-and-labelling-regime)

16 About | Task Force on Climate-Related Financial Disclosures (TCFD) (https://www.fsb-tcfd.org/about/)

17 IFRS – Home (https://www.ifrs.org/)

18 IFRS – IFRS Foundation welcomes culmination of TCFD work and transfer of TCFD monitoring responsibilities to ISSB from 2024 (https://www.ifrs.org/news-and-events/news/2023/07/foundation-welcomes-tcfd-responsibilities-from-2024/)

5.2 Ethical, Sustainable and Responsible Investing

In the investment industry, the expressions 'ethical investment', 'environmental investment', 'green investment', 'responsible investment' and 'socially responsible investment (SRI)' are often used interchangeably but can infer different things, which can be quite confusing. Together, with ESG, these strands are often brought together under the label of 'responsible investing'.

Broadly speaking, 'responsible investing' can reflect a range of ethical, moral, religious or socially responsible beliefs or policies, which can heavily influence the choice of investments and how investments are managed. Also included in this group is the growing number of Shariah investments, which meet the rules of Islamic finance. A key trend in recent years has been the increasing debate on environmental and social issues and the scale of concern about environmental change is being reflected in the asset management industry.

United Nations Sustainable Development Goals (SGDs)

The 17 United Nations Sustainable Development Goals (SGDs)[19] (comprising 169 targets) were adopted by all United Nations Member States in 2015 and provide a shared blueprint for peace and prosperity for people and the planet, now and into the future. Together, they provide a policy framework for governments, NGOs and corporations to build upon.

Green finance and sustainable finance are becoming increasingly important topics in the financial services sector. Sustainable finance refers to the process of taking due account of environmental and social considerations in investment decision-making, leading to increased investments in longer term and sustainable activities. Climate finance is an emerging form of green finance available for projects in developing countries that helps reduce emissions or adapt to climate change. This is achieved either via increasing the revenues available to public and private development projects (such as tariff support or carbon finance) or by improving project capital structure; for example, by reducing the costs of debt and equity.

The Global Ethical Finance Initiative (GEFI)[20] is one of the most prominent global organisations for ethical finance and describes itself as:

> *'the hub at the centre of the ethical finance movement. We curate independent conversations among a broad coalition of financial services stakeholders, as well as delivering practical projects. We are the partner for action on ethical finance.'*

GEFI hosts events around the world while leading campaigns, building an ecosystem for initiatives and research into ethical finance.

19 THE 17 GOALS | Sustainable Development (https://sdgs.un.org/goals)
20 The Global Ethical Finance Initiative (GEFI) (https://www.globalethicalfinance.org/)

End of Chapter Questions

Think of an answer for each question and refer to the appropriate section for confirmation.

1. **Name four main activities undertaken by the professional financial services sector and five by the retail sector.**
   Answer Reference: Section 2

2. **Explain how Lloyd's marketplace (including unlimited liability members and limited liability corporate entities) influences the distribution of risks and profits among its participants.**
   Answer Reference: Section 2.5

3. **What are the main types of services provided by investment banks?**
   Answer Reference: Section 3.1

4. **What services does a custodian offer?**
   Answer Reference: Section 3.2

5. **How does a 'mutual savings' institution differ from a retail bank?**
   Answer Reference: Sections 3.3 and 3.4

6. **What is protection planning and what scenarios might necessitate the use of protection policies?**
   Answer Reference: Section 3.6

7. **What sectors of the financial services sector do the International Capital Market Association (ICMA) and the International Swaps and Derivatives Association (ISDA) represent?**
   Answer Reference: Section 3.13

8. **What is the role of a third-party administrator?**
   Answer Reference: Section 3.14

9. **What are the two types of financial adviser, and how does the range of products they advise on differ?**
   Answer Reference: Section 4.2

10. **What are the six Principles of Responsible Investment (PRI)?**
    Answer Reference: Section 5.1

Chapter Two

The Economic Environment

1. **Introduction** 27
2. **Factors Determining Economic Activity** 27
3. **The Economic Cycle and Economic Policy** 30
4. **Central Banks** 34
5. **Key Economic Indicators** 37

This syllabus area will provide approximately 4 of the 50 examination questions

1. Introduction

Having introduced financial services, we can now start exploring the system in more detail, from top to bottom. We begin by turning to the broader economic environment in which the financial services sector operates.

First, we will look at how economic activity is determined in various economic and political systems, and the stages of the **economic cycle**. We will then look at the role of government in determining economic policy as well as the role of governments and central banks in the management of those economic activities.

Finally, the chapter concludes with an explanation of some of the key economic measures that provide an indication of the state of an economy.

2. Factors Determining Economic Activity

Learning Objective

2.1.1 Know the factors which determine the level of economic activity: state-controlled economies; market economies; mixed economies; open economies

Today, every country is in some way in competition with all other countries in the world, be that for resources, productivity or wealth. Each country has a set of characteristics, such as natural resources and a skilled workforce, which can influence their ability to grow their economy and compete with other countries.

While it is not just economic factors that influence economic development, they are important for understanding the capacity or the ability of an economy to develop on its own. There are several factors affecting **economic growth**, and it is helpful

to split them into demand-side factors (eg, consumer spending) and supply-side factors (eg, productive capacity). Each of these factors influences the available economic resources and growth opportunities within a country.

Economic systems are the means by which countries determine how they will use these resources to resolve the basic problem of what, how much, how, and for whom, to produce. To this extent, all countries are in competition with one another and subject to the economic imbalances of their own state. The main types of economic systems are a planned economy, a market economy and a **mixed economy**, while an **open economy** refers to a country's economic relationship with the rest of the world. Conversely, a **closed economy** is one which does not trade outside of its borders or has little relationship with other countries. The main systems are considered below.

2.1 State-Controlled Economies

A state-controlled economy is one in which the state (in the form of the government) decides what is produced and how it is distributed; they are also known as planned economies or command economies. The best-known example of a state-controlled economy was the Soviet Union throughout most of the 20th century.

Sometimes, these economies are referred to as 'planned economies', because the production and allocation of resources is planned in advance rather than being allowed to respond to market forces. The perceived advantage of a planned economy is suggested to be low levels of inequality and unemployment, with the common good replacing profit as the primary incentive of production. However, this may not be the case and large inequalities can arise, as seen in countries such as Russia and Venezuela. The need for careful planning and control can bring about excessive layers of bureaucracy, and state control inevitably removes a great deal of individual choice.

These latter factors have contributed to the reform of many planned economies and the introduction of a more mixed economy (covered in more detail in section 2.3).

2.2 Market Economies

In a market economy, the forces of supply and demand determine how resources are allocated.

Businesses produce goods and services to meet the demand from consumers. The interaction of demand from consumers and supply from businesses in the market will result in the market-clearing price – the price that reflects the balance between what consumers will willingly pay for goods and services, and what suppliers will willingly accept for them.

If there is oversupply, the price will be low and some producers will leave the market. If there is undersupply, the price will be high, attracting new producers into the market.

There is a market not only for goods and services, but also for productive assets, such as capital goods (eg, machinery), labour and money. For the labour market, it is the wage level that is effectively the 'price', and for the money market it is the interest rate.

People compete for jobs and companies compete for customers in a market economy. Scarce resources, including skilled labour (such as that provided by a software engineer) or a financial asset (such as a share in a successful company) will have a high value. In a market economy, competition means that lesser skilled software engineers and shares in unsuccessful companies will be much cheaper. Ultimately, competition could bring about the collapse of the unsuccessful company and result in the lesser skilled software engineer seeking an alternative career.

2.3 Mixed Economies

A mixed economy combines a market economy with some element of state control. The vast majority of established markets operate as mixed economies to a lesser or greater extent.

While most of us would agree that unsuccessful companies should be allowed to fail, we generally feel that the less able in society should be cushioned from the full force of the market economy.

In a mixed economy, the government will provide a welfare system to support the unemployed, the infirm and the elderly, in tandem with the market-driven aspects of the economy. Governments will also spend money running key areas such as defence, education, public transport, health and police services.

Governments raise finance for this public expenditure by:

- collecting taxes directly from wage-earners and companies
- collecting indirect taxes (eg, sales tax and taxes on petrol, cigarettes and alcohol), and
- raising money through borrowing in the capital markets.

2.4 Open Economies

In an open economy, there are few barriers to trade or controls over foreign exchange.

Although most western governments create barriers to protect their citizens against illegal drugs and other dangers, they generally have policies to allow or encourage free trade.

From time to time, issues will arise when one country believes another is taking unfair advantage of trade policies and will take some form of retaliatory action, possibly including the imposition of sanctions. For example, trade tensions between the US and other countries have seen the US introduce tariffs on imports to protect their domestic industry; this has led to international concerns about the rise of protectionism. When a country prevents other countries from trading freely with it in order to preserve its domestic market, the practice is usually referred to as protectionism.

The World Trade Organization (WTO) exists to promote the growth of free trade between economies. It is, therefore, sometimes called upon to arbitrate when disputes arise. In addition to global agreements on trade under the WTO, there are many regional and bilateral trade agreements that go beyond commitments made in the WTO that aim to increase trade and boost economic growth.

It should be noted that both market and mixed economies can also be open economies.

3. The Economic Cycle and Economic Policy

Learning Objective

2.1.2 Know the stages of the economic cycle and the role of government in determining: economic policy; fiscal policy; monetary policy

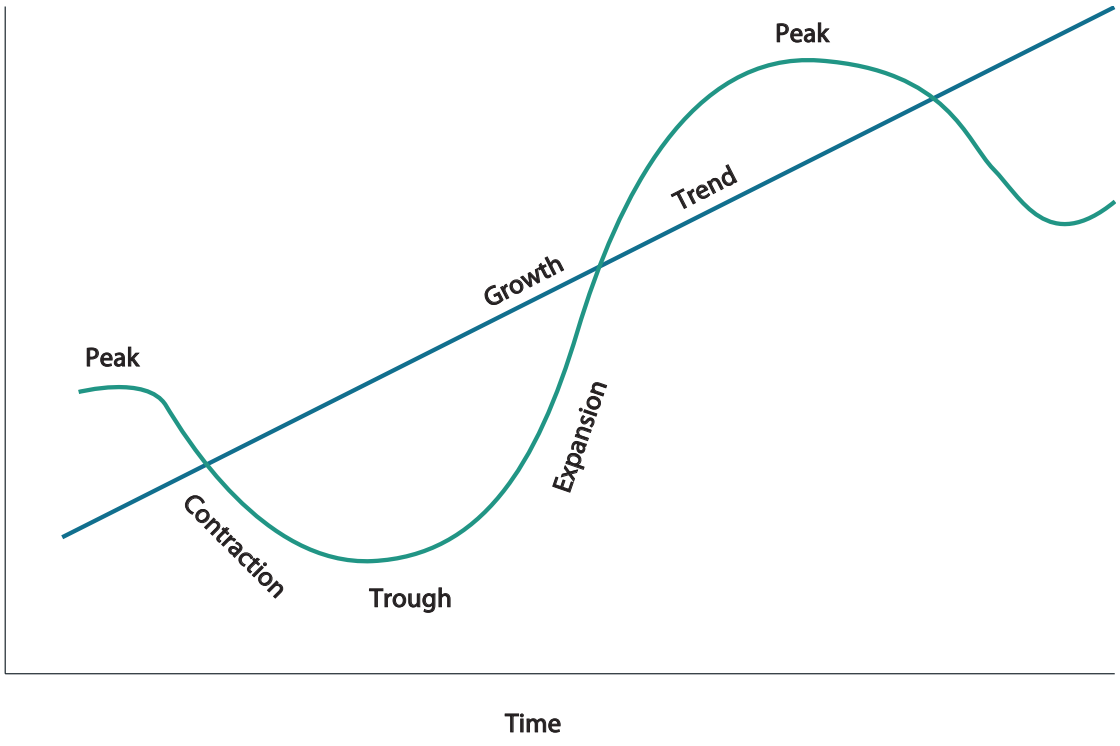
Traditionally, the role of government has been to manage the economy through taxation, economic and **monetary policy**, and to ensure a fair society by the state provision of welfare and benefits to those who meet certain criteria. At the same time, business is left relatively free to address any challenges and opportunities that may arise.

Governments can use a variety of policies when attempting to reduce the impact of fluctuations in economic activity. Collectively, these measures are known as stabilisation policies and are categorised under the broad headings of fiscal and monetary policy. **Fiscal policy** involves making adjustments using government spending and taxation, while monetary policy involves making adjustments to interest rates and the money supply.

3.1 Stages of the Normal Economic Cycle

Over time, the level of economic activity within an economy tends to fluctuate as GDP increases and decreases. The following diagram illustrates the four typical stages of the economic cycle, ie, peak, contraction, trough and expansion.

Level of National Economic Activity



- **Peak** – GDP is at its highest point. Any growth in output stops. This is the point at which GDP is expected to decline, eg, contraction of the economy is expected.
- **Contraction** – this is the period over which GDP declines as economic activity slows. When there are two consecutive quarters of declining GDP or 'negative growth', economists refer to this as a 'recession'.
- **Trough** – GDP is now at its lowest point. The contraction phase is over.
- **Expansion** – economic activity picks up and GDP begins growing once again. Early expansion is usually characterised by a moderate increase in GDP, whereas with late expansion, the rate of increase is higher.

Section 5.2 expands on this cycle.

3.2 Macroeconomic Policy

Macroeconomic policy is the management of the economy by the government in such a way as to influence the performance and behaviour of the economy as a whole.

Policymakers may adopt varying types of philosophies on how best to formulate the economy. One way that effectiveness can be measured is through the '**Magic Square of economic policy**' that highlights four main goals of economic policy: growth, full employment, price stability, and balanced trade.

The main objectives of the 'Magic Square' are as follows:

Economic growth	Measured by increases in gross domestic product (GDP).
Full employment	As far as possible, all factors of production (ie, land, labour capital and enterprise) should be fully utilised.
Price stability	To achieve price stability, typically, a rate of inflation of around 2% is set as a target.
Balance of payments equilibrium	Deficits in external trade, with imports exceeding exports, might be damaging for the prospect of economic growth.

Simultaneous achievement of all four objectives is extremely difficult. For example, the balance of payments tends to deteriorate as economic growth improves. This is because when growth is triggered by an increase in aggregate demand, it often leads to an increase in imports as foreign goods are bought by UK manufacturers and consumers.

3.3 Fiscal Policy

Fiscal policy is any action by the government to spend money, or to collect money in taxes, with the purpose of influencing the condition of the economy. The government will use the following tools to influence the level of spending in the economy.

- **The budget** – the government budget is a statement of public income and expenditure over a period of one year. There will be a balanced budget where income equals expenditure, a deficit budget where expenditure exceeds income or a surplus budget where income exceeds expenditure. With a budget deficit, for example, where public expenditure is more than public income, the government must borrow to make up the difference.
- **Taxation** – taxation can be direct, for example, tax levied on income, or indirect, eg, value-added tax or sales tax charged on goods and services. Through the taxation system, the government can influence the level of spending in the economy. If the government were to reduce taxation and keep its own spending constant, it would mean that firms and households would have more disposable income. This is one method of stimulating demand. On the other hand, the government could reduce demand by raising taxes or reducing its expenditure.

Fiscal policy will change depending on the stage of the economic cycle. Expansionary or 'loose' fiscal policy is aimed at stimulating the economy and involves increasing government expenditure and/or lowering taxes in order to boost economic activity. Contractionary or 'tight' fiscal policy, on the other hand, emphasises cutting government spending and/or raising taxes.

3.3.1 Implications of Fiscal Policy for Business

Planning

Since fiscal policy influences the level of aggregate demand in the economy, businesses need to take this into account when planning output levels, future employment levels, and also, deciding on investments. Planning will be much easier if government policy is stable.

Cost

Taxation, especially an employer's national insurance contributions, will affect total labour costs, hence the ultimate cost for products and services. In addition, if indirect taxes such as VAT rise, the cost would either have to be absorbed by the firm or passed on to the customer.

3.4 Monetary Policy

Monetary policy is the regulation of the economy through control of the monetary system by operating on such variables as the money supply, the level of interest rates and the conditions for the availability of credit. Monetary policy is generally concerned with the volume of money in circulation and the price of money or the interest rate.

The Money Supply

The stock of money in the economy is believed to influence the volume of expenditure in the economy. This includes all forms of money supply aggregates such as the following:

- **M1** is the money supply that is composed of currency, demand deposits and other liquid deposits.
- **M2** is the estimate of money supply, including all physical cash in circulation, plus all the money deposited in checking (current) accounts, savings accounts, and other short-term saving vehicles such as certificates of deposit (CDs).
- **M3** money supply includes M2 money as well as large time deposits, institutional money market funds, short-term repurchase agreements, and larger liquid funds.
- **M4** money supply is the broadest aggregate of money supply, including physical currency as well as financial assets. It is the broadest classification of money and includes all of M3 plus other forms of savings and long-term deposits.

This, in turn, influences the level of output and prices. Under monetary policy, the government can target the stock of money as an economic tool. Governments may decide to impose a 'credit squeeze' and restrict credit lending to control the level of spending and reduce **inflation**. Alternatively, governments may impose reserve requirements on banks, eg, a minimum cash reserve ratio.

Interest Rates

Interest represents the price of money or the cost of borrowing. It is, therefore, assumed that there is a direct relationship between the interest rate and the level of spending in the economy. An increase in interest rates is thought to discourage spending in the economy and thereby reduce the level of aggregate spending. Other possible outcomes include the following:

- Consumers would be encouraged to save with higher interest rates.
- Mortgage payments would rise, leaving less disposable income for homeowners.
- The higher cost of credit would deter borrowing and, hence, spending.
- The level of corporate investments would decline due to higher borrowing costs.
- The corporate sector may lose confidence in the economy and become pessimistic about future prospects.

It has been argued, however, that a higher level of interest rates will not necessarily achieve the above. The following effects of a high rate of interest also need to be considered.

- Higher interest means greater interest income for savers; thus, they may increase their spending.
- Demands for higher wages could arise out of the need to make higher mortgage payments.
- Higher interest rates attract capital inflows. This would lead to an appreciation in the exchange rate, making imports cheaper and more attractive. This will contribute to the balance of payments deficit.
- Lower demand could result in higher unemployment and lower tax income for the government. Unemployment benefits may, therefore, increase.
- Low investment would now mean poor prospects for future economic growth.

As with fiscal policy, monetary policy will vary depending on the stage of the economic cycle. 'Loose' monetary policy seeks to expand or grow an economy by lowering interest rates and/or lowering reserve requirements for banks. 'Tight' monetary policy, on the other hand, aims to contract a growing economy (to prevent 'overheating' and control inflation) by increasing interest rates and/or increasing reserve requirements for banks.

4. Central Banks

Rather than following one or another type of policy, most governments now adopt a pragmatic approach to controlling the level of economic activity through a combination of fiscal and monetary policy. In an increasingly integrated world, however, controlling the level of activity in an open economy in isolation is difficult, as financial markets, rather than individual governments and central banks, tend to dictate economic policy.

Governments implement their monetary policies using their central bank, and a consideration of their role in this implementation is noted below. Central banks are guided in their activities by the Bank for International Settlements (BIS), which was established in 1930. The BIS has 63 member central banks representing countries from around the world which, together, make up approximately 95% of world gross domestic product (GDP). The mission of the BIS is to serve central banks in their pursuit of monetary and financial stability, to foster international cooperation in those areas and to act as a bank for central banks.

4.1 The Role of Central Banks

Learning Objective

2.1.3 Know the function of central banks: Federal Reserve; European Central Bank; Bank of England; Bank of Japan

Central banks operate at the very centre of a nation's financial system. They are usually public bodies but, mainly, they operate independently of government control or political interference. They usually have some or all of the following responsibilities:

- **Monetary Policy Formulation and Implementation**
  - **Goal setting** – Central banks typically have specific goals, such as price stability, full employment and economic growth (as mentioned in section 3.2). They establish targets for key economic indicators like inflation rates and work towards achieving them.
  - **Tools of monetary policy** – Central banks use a variety of tools to implement monetary policy. These include open market operations (buying or selling government securities), adjusting the benchmark interest rates and changing reserve requirements for banks.
  - **Forward guidance** – Central banks often provide forward guidance, communicating their future policy intentions to guide expectations. For example, they may indicate their commitment to keeping interest rates low for an extended period to stimulate economic activity.
- **Financial Stability**
  - **Inflation targeting mechanisms** – Central banks may use inflation targeting frameworks where they aim to keep inflation within a specific target range. The Reserve Bank of Australia, for instance, targets an inflation rate of 2–3% over the medium term.

- **Interest rate management** – Central banks set official short-term interest rates influencing borrowing costs and economic activity. In times of economic downturns, central banks may lower interest rates to near-zero or even negative levels to encourage borrowing and spending. The European Central Bank (ECB) and the Bank of Japan (BOJ) have implemented negative interest rate policies.
- **Managing the national debt** – Central banks often play a role in managing the **national debt**, participating in the issuance, **redemption** and trading of government bonds.

- **Money Supply Control**
  Central banks control the money supply to manage inflation and overall economic stability. In extraordinary circumstances, central banks may implement QE, buying financial assets like government bonds to increase the money supply and lower long-term interest rates. The US Federal Reserve utilised QE measures in response to the 2008 financial crisis.

- **Lender of Last Resort**
  - **Financial crises intervention** – During the 2008 financial crisis, central banks worldwide, including the Federal Reserve, the ECB, and the Bank of England (BoE), acted as lenders of last resort, providing liquidity to stabilise financial markets.
  - **Banker to the banking system** – Central banks accept deposits from, and lend to, commercial banks, serving as a backstop during liquidity crises and preventing the systemic collapse of the banking system.

- **Financial System Regulation and Oversight**
  Central banks, in collaboration with international bodies like the Bank for International Settlements (BIS), develop regulatory frameworks. For example, Basel III sets global standards for banking regulations focusing on capital adequacy and risk management.

  In addition, central banks regulate and oversee domestic banks, ensuring compliance with prudential regulations to maintain a stable and secure financial system.

- **Currency Issuance and Management**
  - **Issuing notes and coins** – Central banks are responsible for issuing and regulating the nation's physical currency.
  - **Influencing currency value** – Central banks influence the value of the national currency through interventions in currency markets.
  - **Currency redesign** – Central banks periodically redesign banknotes to incorporate advanced security features. The Bank of Canada, for instance, introduced polymer banknotes with enhanced durability and security features.

- **Research and Economic Analysis**
  Central banks, such as the BoE, publish regular inflation reports that provide detailed economic analysis, including inflation forecasts, risks, and policy considerations. These reports enhance transparency and communication.

- **Banking Services**
  - **Banker to the government** – Central banks act as bankers to the government, managing government accounts, facilitating transactions, and participating in the issuance and redemption of government securities.
  - **Holding gold and foreign currency reserves** – Central banks hold reserves of gold and foreign currencies to support monetary stability.
  - **Depositors' Protection Scheme** – Some central banks provide depositors' protection schemes to safeguard bank deposits and maintain public confidence in the banking system.

The following table shows details of some of the world's main central banks.

Federal Reserve (the Fed)	• The Federal Reserve System in the US dates back to 1913. The Fed, as it is known, comprises 12 regional Federal Reserve Banks, each of which monitors the activities of, and provides liquidity to, the banks in its region. • The Federal Open Market Committee (FOMC) takes responsibility for decisions which are directed towards its statutory duty of promoting price stability and sustainable economic growth. • The FOMC meets every six weeks or so to examine the latest economic data in order to gauge the health of the economy and determine whether the economically sensitive Fed funds rate should be altered. Very occasionally, it meets in emergency session, if economic circumstances dictate. • As lender of last resort to the US banking system, the Fed rescued a number of US financial institutions and markets from collapse during the financial crisis, including the financing of government bailouts of the US auto industry and agency mortgage associations. In doing so, it prevented widespread panic, and prevented systemic risk from spreading throughout the financial system.
European Central Bank (ECB)	• The ECB is based in Frankfurt. It assumed its central banking responsibilities upon the creation of the euro, on 1 January 1999. • It is principally responsible for setting monetary policy for the entire eurozone, with the objective of maintaining internal price stability. Its objective of keeping inflation, as defined by the harmonised index of consumer prices (HICP), '*close to, but below, 2% in the medium term*' is achieved by influencing those factors that may influence inflation, such as the external value of the euro and growth in the money supply. • The ECB sets its monetary policy through its president and council, the latter of which comprises the governors of each of the eurozone's national central banks. • In 2014, the ECB was given a supervisory role to monitor the financial stability of banks in eurozone states. Its Single Supervisory Mechanism (SSM) for banking supervision aims to ensure the safety and soundness of the European banking system and increase financial integration and stability in Europe. The SSM is an important milestone towards a banking union within the EU.

Bank of England (BoE)	• The UK's central bank, the BoE, was founded in 1694, but it was not until 1997, when the BoE's Monetary Policy Committee (MPC) was established, that the Bank gained operational independence in setting UK monetary policy, in line with that of most other developed nations. • The MPC's primary focus is to ensure that inflation is kept within a government-set range. It does this by setting the base rate, an officially published short-term interest rate and the MPC's sole policy instrument. • In addition to its short-term interest rate-setting role, the BoE is one of the UK's regulators, and assumes responsibility for all other traditional central bank activities – with the exception of managing the national debt and providing a depositors' protection scheme for bank deposits.
Bank of Japan (BoJ)	• The BoJ began operating as Japan's central bank in 1882 and, like the BoE, gained operational independence in 1997. • The Bank is responsible for the country's monetary policy, issuing and managing the external value of the Japanese yen, and acting as lender of last resort to the Japanese banking system.

5. Key Economic Indicators

As well as being essential to the management of the economy, indicators can provide investors with a guide to the health of the economy and aid long-term investment decisions.

Learning Objective

2.1.4 Understand the impact of the following economic data: gross domestic product (GDP); balance of payments; budget deficit/surplus; level of unemployment; exchange rates; inflation/deflation

5.1 Inflation/Deflation

Inflation is a persistent increase in the general level of prices. There are a number of reasons for prices to increase, such as excess demand in the economy, scarcity of resources and key workers or rapidly increasing government spending. Many governments seek to control inflation at a level of about 2–3% per annum (pa) – not letting it get too high (or too low).

High levels of inflation can cause problems:

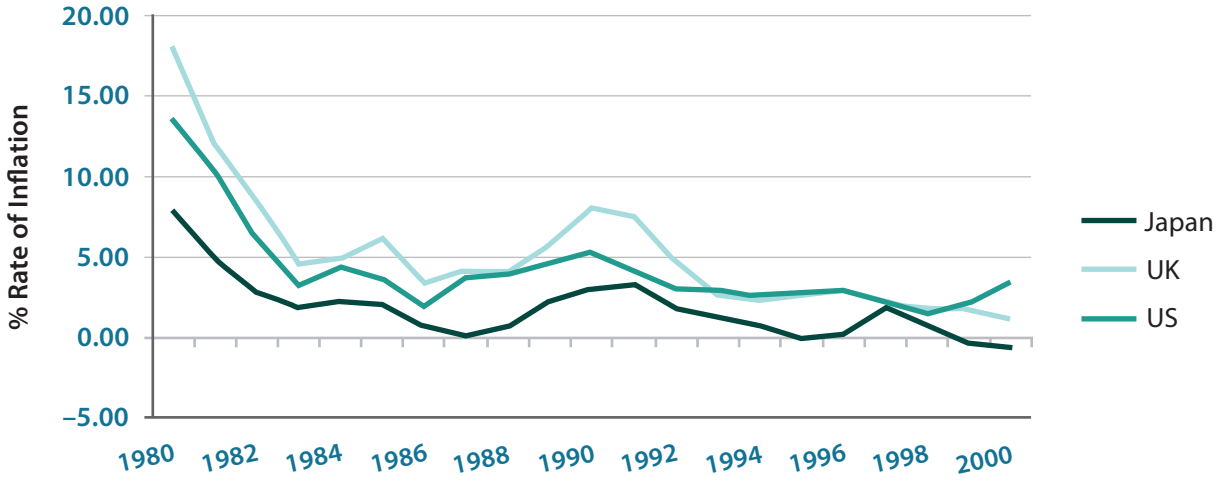
- Businesses have to continually update prices to keep pace with inflation.
- Employees find the real value of their salaries eroded.
- Those on fixed levels of income, such as pensioners, will suffer as the price increases are not matched by increases in income.
- Exports may become less competitive.
- The real value of future pensions and investment income becomes difficult to assess, which might act as a disincentive to save.

There are, however, some positive aspects to high levels of inflation:

- Rising house and asset prices contribute to a 'feel-good' factor (although this might contribute to further inflation as asset owners become more eager to borrow and spend and lead to unsustainable rises in prices and a subsequent crash).
- Borrowers benefit, because the value of borrowers' debt falls in real terms – ie, after adjusting for the effect of inflation.
- Inflation also erodes the real value of a country's national debt and so can benefit an economy in difficult times.

The following chart shows the inflation rates for the US, the UK and Japan from 1980 to 2000. It highlights how governments managed to take control of inflation and reduce it from the damaging levels of the 1970s and early 1980s.

Inflation 1980–2000



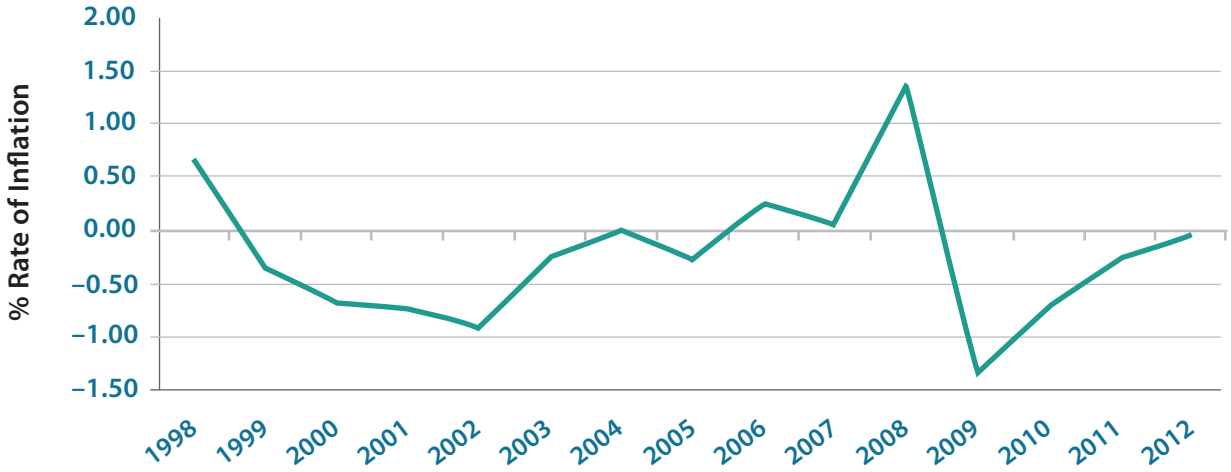
Source: International Monetary Fund (IMF)

Central banks use interest rates to control inflation. They set an interest rate at which they will lend to financial institutions, and this influences the rates that are available to savers and borrowers. The result is that movements in a central bank's rate affect spending by companies and their customers and, over time, the rate of inflation.

Changes in this short-term official rate can take up to two years to have their full impact on inflation, so the central bank has to look ahead when deciding on the appropriate monetary policy. If inflation looks set to rise above target, then the central bank raises rates to slow spending and reduce inflation. Similarly, if inflation looks set to fall below its target level, it reduces its official rate to boost spending and inflation.

As well as experiencing inflation, economies can also face the problems presented by deflation. Deflation is defined as a general fall in price levels. Although not experienced as a worldwide phenomenon since the 1930s, deflation has been seen in an increasing number of countries, including Japan as shown in the following graph, and in eurozone countries, such as Greece and, to a lesser extent, Spain.

Japan



Source: IMF

While it may seem that lower prices are good, deflation can ripple through the economy, such as when it causes high unemployment, and can turn a bad situation, such as a recession, into a worse situation, such as a depression. Deflation can spiral into a vicious circle of reduced spending and a reluctance to borrow as the real burden of debt in an environment of falling prices increases. Deflation can then become a self-reinforcing loop – falling prices create the circumstances for prices to continue falling and this leads to a depression.

It should be noted that falling prices are not necessarily a destructive force per se and, indeed, can be beneficial if they result from positive supply shocks, such as rising productivity growth and greater price competition caused by the globalisation of the world economy and increased price transparency. Also note, the term disinflation refers to a decrease in the rate of inflation. With disinflation, prices are still rising, but at a decreasing rate.

5.1.1 Inflation Measures

There are various measures of inflation, but the most common term encountered is the **consumer price index (CPI)**.

CPIs measure changes in prices to estimate how the prices of goods and services are changing over time. Over any given period, the prices of some goods will rise and some will fall, so inflation measures present a picture of what is happening with the average level of prices in the economy. If inflation is rising, then this implies that, overall, the cost of goods and services is also rising and that you can buy less for one unit of that country's currency. The annual rate of inflation is simply the percentage change in the latest index compared with the value recorded 12 months previously.

In each country, a government department or separate agency will be responsible for producing national statistics such as measures of inflation. They are usually produced by national statistical offices such as the Bureau of Labor Statistics in the US, the National Bureau of Statistics in China, the Japanese Statistics Bureau and the Office for National Statistics (ONS) in the UK.

Different people buy different things and use different services, so estimates of inflation are based on typical goods and services that a household consumes:

- A frequently used method to calculate inflation is to collect price data on a typical 'shopping basket' of, say, 700 items, from month to month. The CPI market basket is developed from detailed expenditure information provided by families and individuals on what they actually bought.
- The content of the basket is fixed for a period of 12 months and different weights are attached to various items in the basket reflecting their importance in a typical household budget. The content and the weightings attached are reviewed regularly to ensure that they remain up to date.
- To calculate changes in price, the government agency sets a base year for the total cost of the 'shopping basket', which is then converted into an index of 100.
- On a monthly basis, prices are collected again, and the cost of the basket is recalculated resulting in a revised index number.

The resulting rate of inflation is a measure of average changes in prices paid by consumers. Because it is based on samples, it will not necessarily reflect the change in prices that an individual might experience if their expenditure pattern differs from the average.

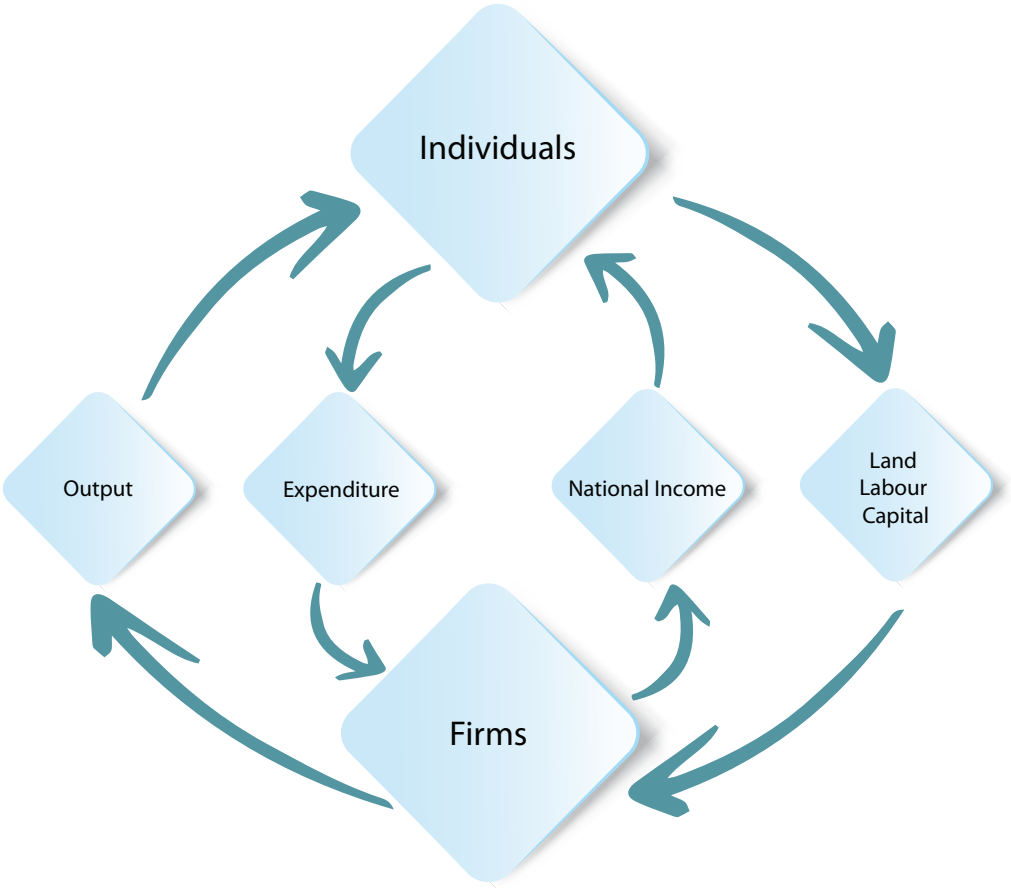
International standards for the calculation of the CPI are published by the IMF in conjunction with major international organisations. The procedures used in different countries are not static but continue to evolve and improve, so it is important to recognise that there are different ways of calculating inflation, and that different measures may give alternative pictures of what is happening in an economy.

In addition to inflation measures like the CPI, there are a number of other economic statistics carefully watched by governments and by other market participants as potentially significant indicators of how economies are performing.

5.2 Gross Domestic Product (GDP)

At the very simplest level, an economy comprises two distinct groups: individuals and firms. Individuals supply firms with the productive resources of the economy in exchange for an income. In turn, these individuals use this income to buy output produced by firms employing these resources. This gives rise to what is known as the circular flow of income.

Simplified Model of the Economy



This economic activity can be measured in one of three ways, namely:

- by the total income paid by firms to individuals
- by individuals' total expenditure on firms' output, or
- by the value of total output generated by firms.

GDP is the most commonly used measure of a country's output. It measures economic activity on an expenditure basis and is typically calculated quarterly as follows:

Gross Domestic Product		
	C	consumer spending
plus	G	government spending
plus	I	investment
plus	X	exports
less	M	imports
equals	GDP	Gross Domestic Product

And expressed as:

$$C + G + I + (X - M) = GDP$$

Economic Growth

There are many sources from which economic growth can emanate, but in the long run, the rate of sustainable growth (or trend rate of growth) ultimately depends on:

- the growth and productivity of the labour force
- the rate at which an economy efficiently channels its domestic savings and capital attracted from overseas into new and innovative technology and replaces obsolescent capital equipment, and
- the extent to which an economy's infrastructure is maintained and developed to cope with growing transport, communication and energy needs.

In a mature economy, the labour force typically grows at about 1% pa, though this can vary. Long-term productivity growth is dependent on factors such as education and training and the utilisation of labour-saving new technology. Moreover, productivity gains are more difficult to extract in a post-industrialised economy than in one with a large manufacturing base.

Given these factors, the US's long-term trend rate of economic growth has averaged nearly 3%. In developing economies, however, economic growth rates of up to 10% pa are not uncommon.

The fact that actual growth fluctuates and deviates from trend growth in the short term gives rise to the economic cycle, or business cycle, as seen in section 3.1.

When an economy is growing in excess of its trend growth rate, actual output will exceed potential output, often with inflationary consequences. However, when a country's output contracts – that is, when its economic growth rate turns negative for at least two consecutive calendar quarters – the economy is said to be in recession, or entering a deflationary period, resulting in spare capacity and unemployment.

5.3 Balance of Payments (BoP) and Exchange Rates

The balance of payments (BoP) is a summary of all the transactions between a country and the rest of the world. If the country imports more than it exports, there is a balance of payments deficit. If the country exports more than it imports, there is a balance of payments surplus.

The main components of the balance of payments are the trade balance, the current account and the capital account.

Trade Balance	• The trade balance comprises:
	  • **a visible trade balance** – the difference between the value of imported and exported goods, such as those arising from the trade of raw materials and manufactured goods, and
	  • **an invisible trade balance** – the difference between the value of imported and exported services, arising from services such as financial services (including banking) and tourism.
	• If a country has a trade deficit in one of these areas or overall, this means that it imports more than it exports, and if it has a trade surplus, it exports more than it imports.

Current Account	• The current account is used to calculate the total value of goods and services that flow into and out of a country. • The current account comprises the trade balance figures for the visibles and invisibles. • To these figures are added other receipts, such as dividends from overseas assets and remittances from nationals working abroad.
Capital Account	• The capital account records international capital transactions related to investment in business, real estate, bonds and stocks. This includes transactions relating to the ownership of fixed assets and the purchase and sale of domestic and foreign investment assets. • These are usually divided into categories such as foreign direct investment, when an overseas firm acquires a new plant or an existing business, portfolio investment which includes trading in stocks and bonds, and other investments, which include transactions in currency and bank deposits.

For the balance of payments to balance, the current account must equal the capital account plus or minus a balancing item – used to rectify the many errors in compiling the balance of payments – plus or minus any change in central bank foreign currency reserves.

A current account deficit resulting from a country being a net importer of overseas goods and services must be met by a net inflow of capital from overseas, taking account of any measurement errors and any central bank intervention in the foreign currency market.

Having the 'right' exchange rate is critical to the level of international trade undertaken, to international competitiveness and, therefore, to a country's economic position. This can be understood by looking at what happens if a country's exchange rate alters.

If the value of its currency rises, then exports will be less competitive, unless producers reduce their prices, and imports will be cheaper and, therefore, more competitive. The result will be either to reduce a trade surplus or worsen a trade deficit.

If its value falls against other currencies, then the reverse happens: exports will be cheaper in foreign markets and so more competitive, and imports will be more expensive and therefore less competitive. A trade surplus or deficit will therefore see an improving position.

5.4 Budget Deficits and the National Debt

A key function of government is to manage the public finances; therefore, a key economic indicator is the level of public sector debt, or the national debt as it is more frequently referred to.

There are a wide number of measures used as key economic indicators, which can be quite confusing. Each measures different sets of data, but essentially, they fall into two main types:

- **Government debt** – essentially this is what the government owes.
- **Budget deficit** – essentially the shortfall between what the government receives in tax receipts and what it spends.

Debt measures are also usually presented as a percentage of GDP, since comparisons over time need to allow for effects such as inflation. Dividing by GDP is the conventional way of doing this.

The budget deficit is the difference each year between government expenditure and government income; the latter mainly from taxes. In a buoyant economy, government spending tends to be less than income, with substantial tax revenues generated from corporate profits and high levels of employment. This enables the government to reduce public sector (ie, government) borrowing.

In a slowing economy, government spending tends to exceed tax revenues and the government will need to raise borrowing by issuing government bonds. If left unaddressed, high levels of public borrowing and debt, and the associated significant interest payments, risk undermining growth and economic stability and could negatively affect the country's credit rating. As mentioned earlier, excessive government spending, causing a growing budget deficit, has the potential to bring about an increase in the rate of inflation.

5.5 Level of Unemployment

The extent to which those seeking employment cannot find work is an important indicator of the health of the economy. There is always likely to be some unemployment in an economy – certain people are in the process of either looking for a new job that better suits them, or returning to the workforce after some time off, they could be new immigrants, lack the right skills, or are living in areas in which it is difficult to find work. Economists refer to this as the 'natural rate of unemployment'.

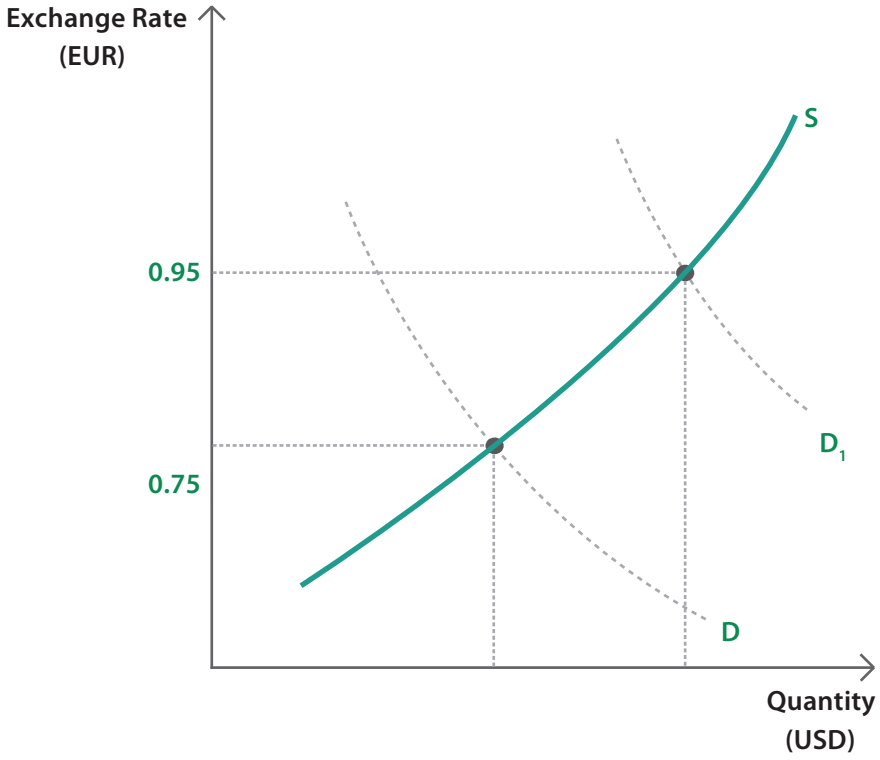
Higher levels of unemployment indicate low demand in the economy for goods and services produced and sold to consumers and, therefore, low demand for people to provide them.

High unemployment levels will have a negative impact on a government's finances. The government will need to increase social security/welfare payments, and its income will decrease because of the lack of tax revenues from the unemployed. Care needs to be taken when looking at official unemployment figures as the latest trends that use fixed hour contracts of employment in the gig economy can distort these statistics and disguise higher underlying unemployment figures.

5.6 Exchange Rates

An exchange rate can be described as the price of one currency in terms of another and is quoted for pairs of currencies. If the exchange rate changes, such that currency A can buy more of currency B, this shows an appreciation of currency A and a depreciation of currency B.

For example, in the diagram below, we can see the exchange rate moves such that USD 1 (formerly, equivalent to EUR 0.75) is now equivalent to EUR 0.95. This appreciation of the USD against the EUR has been caused by an increase in demand for the USD.



Note that the mechanics of exchange rates are covered in chapter 5.

In this context, we are considering the effect that exchange rates have on an economy. Generally, very volatile exchange rates (ie, rates that are not stable and have large variations), create a great deal of uncertainty and affect economic activity, as well as investment decisions that involve foreign assets. For example, an investor based in the UK may have property in the US, ie, a US dollar-denominated asset. If the US dollar were to depreciate relative to sterling, the investor would experience a decrease in the value of their asset even though property prices in the US may not have changed.

A significant factor that influences the volatility of exchange rates is the exchange rate regime that the central bank follows. These vary widely, but two extremes are described below:

1. **Fixed rate system** – the exchange rate is pegged to a particular currency, eg, the US dollar or a basket of currencies. To ensure that the rate stays 'fixed', the central bank will intervene in the currency market to offset the natural forces of demand and supply by spending its foreign currency reserves or buying foreign currency.
2. **Floating rate system** – the exchange rate is determined by the natural forces of demand and supply. There is no intervention in the market by the central bank. This is, sometimes, referred to as a 'free' floating rate system.

Examples of exchange rate regimes that fall within the two extremes include the following:

- **Target zone** – similar to the fixed rate system; however, the exchange rate is managed within a band (with upper and lower limits). This means that the rate can fluctuate; therefore, the central bank will only intervene if the upper or lower limits for the rate are breached.
- **Crawling peg** – similar to target zone, but with upper and lower limit bands gradually widening. This system is generally used as a strategy for moving away from a fixed rate system.
- **Managed float** – this is also known as a 'dirty' float. With this system, the exchange rate is largely a floating rate, but with occasional intervention from the central bank to alter the direction of the rate or the speed with which the rate changes.

End of Chapter Questions

Think of an answer for each question and refer to the appropriate section for confirmation.

1. **What are the key differences between state-controlled and market economies?**
   Answer Reference: Sections 2.1 and 2.2

2. **Which international organisation has the role of reducing trade barriers?**
   Answer Reference: Section 2.4

3. **What are the typical stages of the normal economic cycle?**
   Answer Reference: Section 3.1

4. **What are the main tools of fiscal policy?**
   Answer Reference: Section 3.3

5. **What are the tools of monetary policy and how might they be used to influence the economy?**
   Answer Reference: Section 3.4

6. **What are the main functions of a central bank?**
   Answer Reference: Section 4.1

7. **What are the negative effects of inflation?**
   Answer Reference: Section 5.1

8. **What economic measure is used as an indicator of the health of the economy?**
   Answer Reference: Section 5.2

9. **What does the balance of payments represent?**
   Answer Reference: Section 5.3

10. **What is the impact of high unemployment levels on the economy?**
    Answer Reference: Section 5.5

Chapter Three

Equities/Stocks

1. **Company Formation and Features, and Benefits of Shares** 51
2. **The Risks of Owning Shares** 60
3. **Corporate Actions** 62
4. **Primary and Secondary Markets** 69
5. **Depositary Receipts** 70
6. **World Stock Markets** 72
7. **Stock Market Indices** 75
8. **Settlement Systems** 77

This syllabus area will provide approximately 9 of the 50 examination questions

1. Company Formation and Features, and Benefits of Shares

Whether referred to as shares, equities or stocks, in general terms, they refer to capital issued by a company and invested by its owners. By contrast, the long-term borrowing, or debt, of a company is usually referred to as bonds, and we will cover those in the next chapter.

This chapter starts by explaining how a company is formed. We will then consider the features of equities, the benefits and risks of owning shares and the effect of corporate actions. Later, we will move on to the requirements for listing on a stock exchange, look at world stock exchanges and indices, and then outline how equities are traded and settled.

Learning Objective

3.1.1 Know how a company is formed and the differences between private and public companies

3.1.2 Know the features and benefits of ordinary and preference shares/common stock and preferred stock: dividend; capital gain; share benefits; right to subscribe for new shares; right to vote

3.1.3 Be able to calculate the share dividend yield

1.1 Company Formation

Many businesses, both large and small, around the world are set up as companies. The process for doing this is different depending upon the jurisdiction in which the company is being formed. Regardless of jurisdiction, however, forming a company is inexpensive and requires the founders of the company to complete a series of documents and lodge these with the appropriate authority. For example, in the UK, a Memorandum of Association

confirming the intent to form a company and **Articles of Association** setting out the relationship between the company and its owners are required to be lodged with the Registrar of Companies at Companies House. In the US, Articles of Incorporation or a Certificate of Incorporation need to be lodged with the Secretary of State office of the relevant state.

1.1.1 Private and Public Companies

Companies are usually established as either private companies or public companies. It is only public companies that are permitted to issue shares to the public. As a result, all listed companies are public companies, but not all public companies are listed on a stock exchange.

The name of the company provides an indication as to whether it is public or private. For example, UK public companies have 'plc' (public limited company) in their names while UK private companies have the word 'limited' or 'ltd'. As stated before, it is perfectly possible for a company to 'just be' a plc, and not be listed on a stock exchange. The global bank HSBC Holdings is a plc and is listed on a number of worldwide stock exchanges including the London Stock Exchange (LSE), New York Stock Exchange (NYSE), Hong Kong Exchanges and Clearing (HKEX), Paris Stock Exchange (**Euronext**) and the Bermuda Stock Exchange (BSX). In contrast, Virgin Holdings, the business empire of Richard Branson, is a plc, but is not listed.

1.2 Ordinary Shares and Common Stock

The terminology used varies from market to market, so equity capital may be known as ordinary shares, common shares or common stock. Whatever terminology is used, they all share the same characteristics: namely, they carry the full risk and reward of investing in a company. If a company does well, its shareholders should do well; if it does badly, they could lose all of their money invested.

As the owners of the company, it is the shareholders who vote yes or no to each **resolution** put forward by the company directors at company meetings (or choose to abstain from voting). For example, an offer to take over a company may be made, and the directors may propose that it is accepted but this will be subject to a vote by shareholders. If the shareholders vote no, then the resolution will not be passed, and the directors will have to think again.

Shareholders share in the profits of the company by receiving dividends declared by the company, which tend to be paid half-yearly or even quarterly. The company directors will propose a dividend, and the proposed dividend will need to be ratified by the shareholders before it is formally declared as payable.

However, if the company does badly, it is also the shareholders that will suffer. If the company closes down, often described as the company being 'wound up', the shareholders are paid after everybody else, ie, tax authorities, the bank, suppliers and other creditors. If there is nothing left, then the shareholders get nothing. If there is money left, it all belongs to the shareholders.

Generally, shareholders of companies have limited liability which means that the liability of shareholders for the debts of the company is limited to the amount that they agreed to pay to the company on initial subscription.

Example

The par value of a share of a US stock is the price it is listed at in the corporate charter when first issued. To comply with this requirement, most companies set a nominal value for par, such as one cent or less ($0.01). If a US company is created with a share capital of $100, then it may be made up of 10,000 ordinary one cent shares. Assuming that each share is fully paid, an initial shareholder who subscribes for 2,000 shares will pay $20.

In the event that the company goes bankrupt, the liability of that shareholder for the company's debts is limited to the amount they subscribed, that is, $20.

In the US, the number of shares of stock issued to the first shareholders may be any number up to the number of **authorised shares**. If more shareholders are sought in the future, then the company can issue substantially less than the total authorised number. When determining the number of authorised shares, companies must strike a balance between providing sufficient flexibility for future fundraising and avoiding dilution of ownership. A higher number of authorised shares may provide more room for future growth, but may also dilute ownership and erode shareholder value.

Some shares may be referred to as partly paid or contributing shares. This means that only part of their **nominal value** has been paid up. For example, if a new company was established with an initial capital of US$100, this capital may be made up of 100 US$1 shares. If the shareholders to whom these shares are allocated have paid US$1 per share in full, then the shares are termed 'fully paid'. Alternatively, the shareholders may contribute only half of the initial capital, say US$50 in total, which would require a payment of 50 cents (US$0.50) per share, which is half of the amount due. The shares would then be termed 'partly paid', but each shareholder has an obligation to pay the remaining amount when called upon to do so by the company. If the company went into liquidation, the liquidators can call for the remaining balance to be paid in order to settle the outstanding debts of the company.

1.3 Preference Shares and Preferred Stock

Some companies have **preference shares or preferred stock** as well as ordinary shares. The company's internal rules (its Articles of Association) set out how the preference shares differ from ordinary shares.

Preference shares are a hybrid security with elements of both debt and equity. Although they are technically a form of equity investment, they also have characteristics of debt, particularly that they pay a fixed income. Preference shares have legal priority (known as seniority) over ordinary shares in respect of earnings and, in the event of bankruptcy, in respect of assets. Preferred stock also tends to have credit ratings and ranks above equities in the capital structure.

Normally, preference shares:

- are non-voting, except in certain circumstances such as when their dividends have not been paid
- pay a fixed dividend each year, the amount being set when they are first issued and which has to be paid before dividends on ordinary shares can be paid
- rank ahead of ordinary shares in terms of being paid back if the company is wound up, and
- can be outstanding for a limited period of time if they are convertible or redeemable (see below).

In relation to rights on receiving dividends, preference shares may be cumulative, non-cumulative and/or participating.

If dividends cannot be paid in a particular year, perhaps because the company has insufficient profits, ordinary preference shares would get no dividend. However, if they were cumulative preference shares then the dividend entitlement accumulates. Assuming sufficient profits, the cumulative preference shares will have the arrears of dividend paid in the subsequent year. If the shares were non-cumulative, the dividend from the previous years in which income was insufficient would be lost.

Example

ABC preference shares normally pay a dividend of US$2 per share, and the company announces that they do not have the profits to meet this obligation. In the following year, assuming there are sufficient profits, cumulative preferred shares would pay a dividend of US$4, whereas ordinary preferred shares would pay the US$2. The unpaid US$2 from the previous period would be lost.

Participating preference shares entitle the holder to a basic dividend of, say, 3% a year, but the directors can award a bigger dividend in a year when the profits exceed a certain level. In other words, the preference shareholder can participate in bumper profits.

In relation to **maturity**, preference shares may be perpetual instruments with no redemption date (much like ordinary shares), but preference shares may also be convertible or redeemable. Convertible preference shares carry an option to convert them into the ordinary shares of the company at set intervals and on pre-set terms.

Redeemable shares, as the name implies, have a date at which they may be redeemed; that is, the nominal value of the shares will be paid back to the preference shareholder and the shares cancelled.

It should be noted that US 'preferreds' and 'preferred stocks' may sound similar but are not the same in reality. Preferreds (covered in chapter 4) are considered to be hybrid bonds, whereas 'preferred stocks' are similar to preference shares in practice.

Example

Banks and other financial institutions are regular issuers of preference shares. So, for example, an investor may have the following holding of a preference share issued by Standard Chartered – £1,000 Standard Chartered $7^{3}/_{8}$% non-cumulative irredeemable preference £1 shares with interest payable every six months.

This means:

- The investor will receive a fixed dividend of $7^{3}/_{8}$% each year which is payable in two equal half-yearly instalments on 1 April and 1 November.
- The amount of the dividend is calculated by multiplying the value of shares held (£1,000) by the interest rate of $7^{3}/_{8}$%, which gives a total annual dividend of £73.75 gross, which will be paid in two instalments.
- The dividend will be paid providing that the company makes sufficient profits and has to be paid before any dividend can be paid to ordinary shareholders.
- The term 'non-cumulative' means that if the company does not make sufficient profits to pay the dividend, then it is lost and the arrears are not carried forward.
- The term 'irredeemable' means that there is no fixed date for the shares to be repaid and the capital would normally only be repaid in the event of the company being wound up. The amount the investor would receive is the nominal value of the shares (in other words, £1,000) providing that there are sufficient funds, and they would be paid out before (in preference to) the ordinary shareholders.

1.4 Benefits of Owning Shares

Holding shares in a company is having an ownership stake in that company. Ownership carries certain benefits and rights, and ordinary shareholders expect to be the major beneficiaries of a company's success. This reward or return can take one of the following forms.

1.4.1 Dividends

A dividend is the return that an investor gets for providing the risk capital for a business. Companies pay dividends out of their profits, which form part of their distributable reserves. These are the post-tax profits made over the life of a company, in excess of dividends paid.

Example

ABC plc was formed some years ago. Over the company's life, it has made US$20 million in profits and paid dividends of US$13 million. Distributable reserves at the beginning of the year are, therefore, US$7 million.

This year ABC plc makes post-tax profits of US$3 million and decides to pay a dividend of US$1 million. At the end of the year retained earnings are:

	Millions
Opening balance	7
Profit after tax for year	3
	10
Dividend	(1)
Closing balance	9

Note that despite only making $3 million in the current year, it would be perfectly legal for ABC plc to pay dividends of more than $3 million because it can use the undistributed profits from previous years. This would be described as a naked or uncovered dividend, because the current year's profits were insufficient to fully cover the dividend. Companies occasionally do this, but it is obviously not possible to maintain this long term.

Companies seek, when possible, to pay steadily growing dividends. A fall in dividend payments can lead to a negative reaction among shareholders and a general fall in the willingness to hold the company's shares, or to provide additional capital.

Potential shareholders will compare the dividend paid on a company's shares with the return on other investments. These would include other shares, bonds and bank deposits. A comparison of returns is facilitated by calculating the **dividend yield**, ie, the dividend as a percentage of the current share price.

Example

ABC plc has 20 million ordinary shares, each trading at US$2.50. It pays out a total of US$1 million in dividends. Its dividend yield is calculated by expressing the dividend as a percentage of the total value of the company's shares (the market capitalisation):

$$\frac{\text{Dividend } (1 \text{ million})}{\text{Market capitalisation}} \times 100$$

So, the dividend yield is:

$$\left[1 \text{ million} / \left(20 \text{ million} \times 2.50\right)\right] \times 100 = 2\%$$

Since ABC plc paid US$1 million to shareholders of 20 million shares, the dividend yield can also be calculated on a per-share basis. The dividend per share is 1 million / 20 million shares, ie, US$0.05. So US$0.05 / US$2.50 (the share price) is, again, 2%.

Some companies have a higher-than-average dividend yield, which may be because of the following:

- The company is mature and continues to generate healthy levels of cash, but has limited growth potential, perhaps because the government regulates its selling prices, and so it distributes more of its profits rather than keeping them for reinvestment in the business. Examples are utilities, such as water or electricity companies.
- The company has a low share price for some other reason, perhaps because it is, or is expected to be, relatively unsuccessful; its comparatively high current dividend is, therefore, not expected to be sustained and its share price is not expected to rise resulting in a higher-than-average dividend yield.

The first may be regarded by some investors as an advantage while the second is clearly a disadvantage of such a holding.

In contrast, some companies might have dividend yields that are relatively low. This is generally for the following reasons:

- The share price is high, because the company is viewed by investors as having high growth prospects.
- A large proportion of the profit being generated by the company is being ploughed back into the business, rather than being paid out as dividends.
- A company may also have a low dividend yield as it has been relatively unsuccessful (as in the example above), but the share price has adjusted to reflect the fact that future dividends are expected to be lower.

1.4.2 Capital Gains

Capital gains can be made on shares if their prices increase over time. If an investor purchased a share for US$3, and two years later that share price has risen to US$5, then the investor has made a US$2 capital gain. If they do not sell the share, then the gain is described as being unrealised, and they run the risk of the share price falling before they realise the share and 'bank' their profits.

In the recent past, the long-term total financial return from equities has been fairly evenly split between dividends and capital gain. Whereas dividends need to be reinvested in order to accumulate wealth, capital gains simply build up. However, shares need to be sold to realise any capital gains.

1.4.3 Shareholder Benefits

Some companies provide perks to shareholders, such as a telecoms company offering its shareholders a discounted price on their mobile phones or a shipping company offering cheap ferry tickets. Such benefits can be a pleasant bonus for small investors, but are not normally a big factor in investment decisions.

1.4.4 Right to Subscribe for New Shares

Companies are typically able to issue new shares to anyone, but the consequence is dilution of control for existing shareholders. Pre-emption rights give existing shareholders in companies the right to subscribe for new shares. This means that, unless the shareholders agree to permit the company to issue shares to others, they will be given the option to subscribe for any new share offering before it is offered to the wider public, and in many cases, they receive some compensation if they decide not to do so.

Many countries impose rules on share issues forcing companies to tell existing shareholders of their plans or give existing shareholders the right of first refusal. In the UK, for example, pre-emption rights are taken very seriously and impose some of the toughest constraints on companies raising funds. By contrast, in the US, pre-emption rights for public companies are not common and management can sell new shares to the highest bidder, while existing investors have limited protection from their actions. Elsewhere around the world, some form of pre-emption exists, but the procedures and the levels of protection differ.

Pre-emptive rights are illustrated in the following example.

Example

An investor holds 20,000 ordinary shares of the 100,000 issued ordinary shares in ABC plc. They, therefore, own 20% of ABC plc.

If ABC plc planned to increase the number of issued ordinary shares by allowing investors to subscribe for 50,000 new ordinary shares, the investor would be offered 20% of the new shares, ie, 10,000. This would enable the investor to retain their 20% ownership of the enlarged company.

In summary:

Before the issue

Investor	=	20,000	(20%)
Other shareholders	=	80,000	(80%)
Total	=	100,000	(100%)

New issue

Investor	=	10,000
Other shareholders	=	40,000
Total	=	50,000

After the issue

Investor	=	30,000	(20%)
Other shareholders	=	120,000	(80%)
Total	=	150,000	(100%)

A **rights issue** is one method by which a company can raise additional capital, complying with pre-emptive rights, with existing shareholders having the right to subscribe for new shares (see section 3.2.1).

1.4.5 Right to Vote

Ordinary shareholders have the right to vote on matters presented to them at company meetings. This would include the right to vote on proposed dividends and other matters, such as the appointment, or reappointment, of directors.

The votes are normally allocated on the basis of one share = one vote.

The votes are cast in one of two ways:

- The individual shareholder can attend the company meeting and vote.
- The individual shareholder can appoint someone else to vote on their behalf – this is commonly referred to as voting by proxy.

However, some companies issue different share classes, for some of which voting rights are restricted or non-existent. This allows some shareholders to control the company while only holding a smaller proportion of the shares. For example, Alphabet, the holding company for Google, has different classes of shares that allow its founders to control the direction of the company without owning a majority of the shares. Approaches such as this have been met with a negative response from investors, as the demands for greater environmental and social governance accelerate.

In practice, most shares these days are held in electronic form in stockbrokers' or investment managers' nominee accounts operated by nominee companies – these companies are used solely for holding and administering shares and other investments. The nominee company does not trade, and so is described as 'bankruptcy remote' as the chances of it going into liquidation are low. It is the nominee's name that appears on the record of ownership of the shares and so, if the shareholder wishes to vote, they will need to arrange for the operator of the nominee account to vote on their behalf.

2. The Risks of Owning Shares

Learning Objective

3.1.4 Understand the advantages, disadvantages and risks associated with owning shares/stock: price risk; liquidity risk; issuer risk; foreign exchange risk

The risk(s) associated with owning shares depends on the shares held. The issuing company, including its management team, the industry it is in, and even the country or countries it operates in, contribute to determining the level of risk associated with holding any given shares. To offset this potential risk, shares offer the potential for relatively high returns when a company is successful. The main risks associated with holding shares can be classified under the following headings.

2.1 Price and Market Risk

Price risk is the risk that share prices in general might fall. Even though the company involved might maintain dividend payments, investors could face a loss of capital. Market-wide falls in equity prices occur, unfortunately, on a fairly frequent basis. Here are some examples:

- Worldwide equities fell by nearly 20% on 19 October 1987, with some shares falling by even more than this. That day, generally referred to as 'Black Monday', is when the Dow Jones index fell by 22.3%, wiping US$500 billion off share prices.
- The arrival of the internet age sparked suggestions that a new economy was in development and led to a surge in internet stocks. Many of these stocks were quoted on the NASDAQ exchange, whose index went from 600 to 5,000 by the year 2000. This led the chairman of the Federal Reserve to describe investor behaviour as 'irrational exuberance'. In mid-2000, reality started to settle in and the 'dot-com' bubble was firmly popped, with the NASDAQ index crashing to below the 2000 mark.
- The subprime crisis and credit crunch brought about another fall in stock markets. In 2008, the NASDAQ had its worst ever fall, declining by 40.54% over the year, the Dow Jones Industrial Average (DJIA) fell 33.84%, and the FTSE 100 tumbled 31% in the largest annual drop seen since its launch in 1984.
- More recently, in the first part of 2020, equity markets worldwide fell as they reacted to the coronavirus (COVID-19) pandemic.

These examples clearly demonstrate the risks associated with equity investment from general price collapses. In addition to these market-wide movements, any single company can experience dramatic falls in its share price when it discloses bad news, such as the loss of a major contract.

Price risk varies between companies: volatile shares, such as those in companies highly exposed to global economic trends, tend to exhibit more price risk than 'defensive' shares, such as those of utility companies.

2.2 Liquidity Risk

Liquidity risk is the risk that shares may be difficult to sell at a reasonable price. This, typically, occurs in respect of shares in 'thinly traded' companies – smaller companies, or those that do not have much trading activity. It can also happen, to a lesser degree, when share prices in general are falling, in which case the spread between the **bid price** (the price at which dealers will buy shares) and the **offer price** (the price at which dealers will sell shares) may widen.

> **Example**
>
> Prices for ABC plc shares might be $7.20–$7.22 on a normal day. To begin to see a capital gain, an investor who buys shares (at $7.22) needs the price to rise so that the bid (the price at which they could sell) has risen by more than $0.02 (eg, from $7.20 to $7.23).
>
> If there was a general market downturn, the dealer might widen the price spread to, say, $7.00–$7.20 to deter sellers. An investor wanting to sell would be forced to accept the much lower price.

Shares in smaller companies tend to have a greater liquidity risk than shares in larger companies – smaller companies also tend to have a wider price spread than larger, more actively-traded companies.

2.3 Issuer Risk

This is the risk that the issuer collapses and the ordinary shares become worthless.

In general, it is unlikely that larger, well-established companies would collapse, and the risk could be seen, therefore, as insignificant. Events such as the collapse of Enron and Lehman Brothers, however, show that the risk is a real and present one and cannot be ignored.

Shares in new companies which have not yet managed to report profits may have a substantial issuer risk.

2.4 Foreign Exchange Risk

This is the risk that currency price movements will have a negative effect on the value of an investment.

> **Example**
>
> A European investor may buy 1,000 US shares today at, say, US$1 per share when the exchange rate is US$1:€0.75. This would give a total cost of US$1,000 or €750. Let us say that the shares rise to US$1.2 per share and the investor sells their holding for US$1,200 and so has made a gain of 20% in dollar terms. If the exchange rate changes, however, the full amount of this gain might not be realised. If the dollar has weakened to, say, US$1:€0.60, then the proceeds of sale when they are converted back into euros would only be worth €720.

Currency movements can, therefore, wipe out or reduce a gain, but equally can enhance a gain if the currency movement is in the opposite direction.

3. Corporate Actions

Learning Objective

3.1.5 Know the definition of a corporate action and the difference between mandatory, voluntary and mandatory with options, including takeovers and mergers

A corporate action occurs when a company does something that affects its **share capital** or its bonds. For example, most companies pay dividends to their shareholders twice a year.

Corporate actions can be classified into the following three types.

1. A **mandatory corporate action** is one mandated by the company, not requiring any intervention from the shareholders or bondholders. The most obvious example of a mandatory corporate action is the payment of a dividend, since all shareholders automatically receive the dividend.
2. A **mandatory corporate action with options** is an action that has some sort of default option that will occur if the shareholder does not intervene. However, until the date at which the default option occurs, the individual shareholders are given the choice to select another option. An example of a mandatory corporate action with options is a rights issue (detailed in section 3.2).
3. A **voluntary corporate action** is an action that requires the shareholder to make a decision. An example is a **takeover** bid – if the company is being bid for, each individual shareholder will need to choose whether to accept the offer or not.

This classification is the one that is used throughout Europe and by the international central securities depositories Euroclear and Clearstream. It should be noted that, in the US, corporate actions are simply divided into two classifications, voluntary and mandatory. The major difference between the two is, therefore, mandatory events with options. In the US, these types of events are split into two or more different events that have to be processed.

3.1 Securities Ratios

Before we look at various types of corporate action, it is necessary to know how the terms of a corporate action, such as a rights issue or **bonus issue**, are expressed – a securities ratio.

When a corporate action is announced, the terms of the event will specify what is to happen. This could be as simple as the amount of dividend that is to be paid per share. For other events, the terms will announce how many new shares the holder is entitled to receive for each existing share that they hold.

So, for example, a company may announce a bonus issue whereby it gives new shares to its investors in proportion to the shares they already hold. The terms of the bonus issue may be expressed as 1:4, which means that the investor will receive one new share for each existing four shares held. This is the standard approach used in European and Asian markets and can be simply remembered by always expressing the terms as the investor will receive 'X new shares for each Y existing share'.

The approach differs in the US. Here, the first number in the securities ratio indicates the final holding after the event with the second number being the original number of shares held. The above example expressed in US terms would be 5:4. So, for example, if a US company announced a 5:4 bonus issue and the investor held 10,000 shares, then the investor would end up with 12,500 shares.

3.2 Types of Corporate Action

Learning Objective

3.1.6 Understand the following terms: bonus/scrip/capitalisation issues/stock splits/reverse stock splits; rights issues/open offer; dividend payments; buybacks

3.1.7 Be able to calculate: theoretical ex-rights price; theoretical ex-bonus price

3.2.1 Rights Issues

A company may wish to raise additional finance by issuing new shares. This might be to provide funds for expansion, or to repay bank loans or bond finance. In such circumstances, it is common for a company to approach its existing shareholders with a 'cash call' – they have already bought some shares in the company, so would they like to buy some more?

A rights issue can be defined as an offer of new shares to existing shareholders, pro rata to their initial holdings. Since it is an offer and the shareholders have a choice, rights issues are examples of a 'mandatory with options' type of corporate action. As an example of a rights issue, the company might offer shareholders the right that for every four shares owned, they can buy one more at a specified price that is at a discount to the current market price.

The options available to an investor vary depending on market practice in each country. The most common type is where the rights are tradable – that is, the investor can sell their right to subscribe for new shares as they have a value because the holder can subscribe at a discount to the current market price.

Example

ABC plc has 100 million shares in issue, currently trading at £4.00 each. To raise finance for expansion, it decides to offer its existing shareholders the right to buy one new share for every four previously held. This would be described as a 1 for 4 rights issue. The price of the rights would be set at a discount to the prevailing market price at, say, £2.00.

Each shareholder is given choices as to how to proceed following a rights issue. For an individual holding four shares in ABC plc, they could do one of the following:

- Take up the rights by paying the £2.00 and increasing their holding in ABC plc to five shares.
- Sell the rights on to another investor. The rights entitlement is transferable (often described as renounceable) and will have a value because it enables the purchase of a share at the discounted price of £2.00.
- Do nothing. If the investor chooses this option, the company's advisers will sell the rights at the best available price and pass on the proceeds (after charges) to the shareholder. (This will, however, depend on the practice adopted in each market.)
- Alternatively, the investor could sell sufficient rights to raise cash and use this to take up the rest. As an example, if an investor had a holding of, say, 4,000 shares then they would have the right to buy 1,000. They could sell sufficient of the rights to raise cash and use this cash to take up the rest of the shares or rights.

The share price of the investor's existing shares will also adjust to reflect the additional shares that are being issued. So, if the investor originally had four shares priced at £4.00 each, worth £16.00, and they can acquire one new share at £2.00, on taking the rights up, the investor will have five shares worth £18.00 or £3.60 each.

The share price will, therefore, change to reflect the effect of the rights issue once the shares go ex-rights (this is the point at which the shares and the rights are traded as two separate instruments).

The adjusted share price of £3.60 is known as the theoretical ex-rights price – theoretical because the actual price will also be determined by demand and supply.

The rights can be sold, and the price is known as the premium. In the example above, if the theoretical ex-rights price is £3.60 and a new share can be acquired for £2.00, then the right to acquire one has a value. That value is the premium and would be £1.60 although, again, the actual price would depend upon demand and supply.

The initial response to the announcement of a rights issue may be for the share price to fall until the market has time to reflect on reasons for the rights issue and take a view on what that means for the prospects for the company. If the issue is to finance expansion, and the strategy makes sense to the investors, then the share price could subsequently recover. If the money is to be used for a strategy that the market does not think highly of, or to shore up operating issues, the response might be the opposite.

The company and its investment banking advisers will have to consider the numbers carefully. If the price at which new shares are offered is too high, the cash call might fail to raise the necessary funds. This would be embarrassing, and potentially costly for any institution that has underwritten the issue.

Underwriters of a share issue agree, for a fee, to buy any portion of the issue not taken up in the market at the issue price. The underwriters then sell the shares they have bought, when market conditions seem opportune to them, and may make a gain or a loss on this sale. The underwriters agree to buy the shares if no one else will, and the company's investment bank will probably underwrite some of the issue itself.

3.2.2 Open Offers

In many European, Middle Eastern and Far East markets, a variation on the rights issue theme is used when a company wants to raise finance: an open offer.

An open offer is made to existing shareholders and gives the holders the opportunity to subscribe for additional shares in the company, normally in proportion to their holdings. In this way it is similar to a rights issue, but the difference is that the right to buy the offered securities is not transferable and so cannot be sold.

For normal open offers, holders of the shares cannot apply for more than their entitlement. However, an open offer can be structured so that holders may be allowed to apply for more than their pro rata entitlement, with the possibility of being scaled back in the event of the offer being oversubscribed.

3.2.3 Bonus Issues

A bonus issue (also known as a scrip or capitalisation issue) is a corporate action where the company gives existing shareholders extra shares without them having to subscribe any further funds.

The company is simply increasing the number of shares held by each shareholder and capitalises earnings by transfer to shareholders' funds. It is a mandatory corporate action.

Example

XYZ plc's shares currently trade at US$12 each. The company decides to make a one-for-one bonus issue, giving each shareholder an additional share for each share they currently hold.

The result is that a single shareholder that held one share worth US$12 now has two shares worth the same amount in total. As the number of shares in issue has doubled, the theoretical ex-bonus price (similar to the theoretical ex-rights price as before) is US$6.

A bonus issue is generally a means of returning value to shareholders and is sometimes offered in lieu of a cash dividend.

3.2.4 Stock Splits and Reverse Stock Splits

A stock split involves sub-dividing or splitting each share into a number of shares. For example, a company with shares having a nominal value of US$5 each and a market price of US$10 may have a split whereby each share is divided into five shares, each with a nominal value of US$1. In theory, the market price of each new share should be US$2 (US$10 ÷ 5).

One of the main motivations for doing this is to reduce the per unit price of each share to make them more marketable. This is typically done in cases where the share price has risen significantly, thus becoming unaffordable for investors.

A reverse split or consolidation is the opposite of a split: shares are combined or consolidated. For example, a company with a share price of US$0.10 may consolidate ten shares into one. The market price of each new share should then be US$1 (US$0.10 x 10). A company may do this if the share price has fallen to a low level and they wish to make their shares more marketable.

3.2.5 Dividends

Dividends are an example of a mandatory corporate action and represent the part of a company's profits that is passed to its shareholders.

Dividends for many large companies are paid twice a year, with the first dividend being declared by the directors and paid approximately halfway through the year (commonly referred to as the interim dividend). The second dividend is paid after approval by shareholders at the company's annual general meeting (AGM), held after the end of the company's financial year, and is referred to as the final dividend for the year. Many large companies now pay dividends more frequently than that, paying them quarterly, with the first three being interim dividends followed by a further final dividend.

The amount paid per share may vary, as it depends on factors such as the overall profitability of the company and any plans it might have for future expansion.

The individual shareholders will receive the dividends either by cheque or by the money being transferred straight into their bank accounts.

A practical difficulty, especially in a large company where shares change hands frequently, is determining who is the correct person to receive dividends. There are, therefore, procedures to minimise the extent that people receive dividends they are not entitled to, or fail to receive the dividends to which they are entitled.

Shares are bought and sold with the right to receive the next declared dividend up to the date when ownership is recorded. The record date is announced (declared) on the declaration date some time before. From the declaration date to the record date, the shares are described as **cum-dividend**. If the shares are purchased cum-dividend, the purchaser will receive the declared dividend. For the period after the record date, the shares go **ex-dividend**. Buyers of shares when they are ex-dividend are not entitled to the declared dividend.

For example, the standard settlement period globally over the last decade has been T+2. This means that a trade is settled two business days after it is executed, so, for example, a trade executed on Monday would settle on the following Wednesday. However, international capital markets have gradually shifted to a shorter standard securities settlement cycle, namely T+1. In May 2024, North America (US, Canada and Mexico) moved to T+1 settlement, which has prompted further jurisdictions to announce a similar move. At the time of writing (December 2024), the EU was conducting a consultation to move to T+1.

The following example illustrates how a dividend timetable works.

Example

The sequence of events for a company listed on the London Stock Exchange (LSE) might be as follows:

ABC plc calculates its interim profits (for the six months to 30 June) and decides to pay a dividend of £0.08 per share. It announces (declares) the dividend in August and states that it will be due to those shareholders who are entered on the shareholders' register on Friday 2 October. The payment of the dividend will then be made to those shareholders at a later specified date.

The 2 October date is variously known as the:

- record date
- register date, or
- books closed date.

Given the record date of Friday 2 October, the LSE sets the ex-dividend date as Thursday 1 October.

On the LSE, the ex-dividend date is normally a Thursday so that all market participants know when it will take place and, on this day, the shares will go ex-dividend and should fall in price by £0.08. This is because new buyers of ABC plc's shares will not be entitled to the dividend.

Problems could occur – if an investor bought shares in ABC plc on Wednesday 30 September and, for some reason, the trade did not settle on Friday 2 October, they would not receive the dividend. A dividend claim would be made and the buyer's broker would then recover the money via the seller's broker.

3.2.6 Takeovers and Mergers

Companies seeking to expand can grow organically or by buying other companies. In a takeover, which may be friendly or hostile, one company (the predator) seeks to acquire another company (the target).

In a successful takeover, the predator company will have acquired more than 50% of the shares of the target company and is described as having gained control of the target company. Usually, the predator company will look to buy all of the shares in the target company, perhaps for cash, but usually using its own shares, or a mixture of cash and shares.

A merger is a similar transaction and occurs when two companies agree to merge their interests. However, in a merger it is usual for one company to exchange new shares for the shares of the other. As a result, the two companies effectively merge to form a bigger entity.

The following table shows examples of some of the largest mergers and acquisitions (M&A) that have taken place since 1998 (adjusted for inflation).

M&A Transactions Worldwide				
Rank	**Date**	**Acquirer**	**Target**	**Value (US$ billions)**
1	1999	Vodafone AirTouch plc	Mannesmann AG	373
2	2017	Shenhua Group	China Guoidan Corp	354
3	2000	America Online inc	Time Warner	325
4	2018	ChemChina	Sinochem	309
5	2019	Gaz de France	Suez	259
6	2000	Glaxo Wellcome	SmithKline Beecham	197
7	2013	Verizon Communications inc	Verizon Wireless inc	173
8	2013	Dow Chemical	DuPont	166
9	2019	United Technologies	Raytheon	147
10	2015	Anheuser-Busch Inbev SA/NV	SABMiller plc	101.5

Source: https://dealroom.net/

3.3 Company Meetings

Learning Objective

3.1.8 Know the purpose and format of annual general meetings

Public companies must hold annual general meetings (AGMs) at which shareholders are given the opportunity to question the directors about the company's strategy and operations (both past and future). The name for these meetings varies from country to country, so in some it is just a general meeting, in others a general assembly, and in the US, it is known as a stockholders' meeting.

The shareholders are also given the opportunity to vote on matters such as the appointment and removal of directors and the payment of the final dividend recommended by the directors.

Most matters put to the shareholders are ordinary resolutions, requiring a simple majority (more than 50%) of those shareholders voting to be passed.

Matters of major importance, such as a proposed change to the company's constitution, require a **special resolution** which will require a larger number of shareholders to vote in favour, generally at least 75% of those voting.

Shareholders can either vote in person or have their vote registered at the meeting by completing a proxy voting form, enabling someone else to register their vote on their behalf.

4. Primary and Secondary Markets

Learning Objective

3.1.9 Know the function of a stock exchange: primary/secondary markets; listing

When a company decides to seek a listing for its shares, the process is described in a number of ways, including:

- becoming listed or quoted
- floating on the stock market
- going public, or
- making an **initial public offering (IPO)**.

Other relevant terminology includes **primary market** and **secondary market**. The term primary market refers to the marketing of new shares in a company to investors for the first time. Once they have acquired shares, the investors may at some point wish to dispose of some or all of their shares and will generally do this through a stock exchange.

This latter process is referred to as dealing on the secondary market.

Primary markets exist to raise capital and enable surplus funds to be matched with investment opportunities, while secondary markets allow the primary market to function efficiently by facilitating a two-way trade in issued securities.

A stock exchange is an organised marketplace for issuing and trading securities by members of that exchange. Each exchange has its own rules and regulations for companies seeking a listing, and continuing obligations for those already listed. All stock exchanges provide both a primary and a secondary market.

4.1 Advantages and Disadvantages of Listing

The advantages and disadvantages to be considered carefully include the following:

Advantages

- **Capital** – an IPO provides the possibility of raising capital and, once listed, further offers of shares are much easier to make. If the shares being offered to the public are those of the company's original founders, then the IPO offers them an exit route and a means to convert their holdings into cash.
- **Takeovers** – a listed company could use its shares as payment to acquire the shares of other companies as part of a takeover or merger.
- **Status** – being a listed company should help the business in marketing itself to customers, suppliers and potential employees.
- **Employees** – stock options to key staff are a way of providing incentives and retaining employees, and options to buy listed company shares that are easily sold in the market are even more attractive.

Disadvantages

- **Regulation** – listed companies must govern themselves in a more open way than private ones and provide detailed and timely information on their financial situation and progress.
- **Takeovers** – listed companies are at risk of being taken over themselves.
- **Short-termism** – shareholders of listed companies tend to exert pressure on the company to reach short-term goals rather than being more patient and looking for longer-term investment and growth.
- **Cost** – in addition to the costs of listing, eg, corporate advisory, legal, accounting and listing fees, companies must meet continuing expenses associated with listing and enhanced disclosure requirements.

5. Depositary Receipts

Learning Objective

3.1.10 Understand the characteristics of depositary receipts: American depositary receipt; global depositary receipt; dividend payments; how created/pre-release facility; rights

American depositary receipts (ADRs) were introduced in 1927 and were originally designed to enable US investors to hold overseas shares without the high dealing costs and settlement delays associated with overseas equity transactions.

ADRs are dollar-denominated and issued in bearer form, with a depository bank as the registered shareholder. They confer the same shareholder rights as if the shares had been purchased directly.

The depository bank makes arrangements for issues such as the payment of dividends, also denominated in US dollars, and voting via a proxy at shareholder meetings. The beneficial owner of the underlying shares may cancel the ADR at any time and become the registered owner of the shares.

The US is a huge pool of potential investment, and so ADRs enable non-US companies to attract US investors to raise funds. ADRs are listed and freely traded on the New York Stock Exchange (NYSE) and NASDAQ. An ADR market also exists on the LSE.

Each ADR has a particular number of underlying shares, or is represented by a fraction of an underlying share. For example, Volkswagen AG (the motor vehicle manufacturer) is listed in Frankfurt and has two classes of shares listed – ordinary shares and preference shares. There are separate ADRs in existence for the ordinary shares and preference shares. Each ADR represents 0.2 individual Volkswagen shares. ADRs give investors a simple, reliable and cost-efficient way to invest in other markets and avoid high dealing and settlement costs. Other well-known companies, such as BP, Nokia, Shell and Vodafone, have issued ADRs.

ADRs are not the only type of depositary receipts that may be issued. Those issued outside the US are termed global depositary receipts (GDRs). These have been issued since 1990 and are traded on many exchanges. Increasingly, depositary receipts are issued by Asian and emerging market issuers. There are also many other types, with specific names that identify the market they relate to, such as Indian depositary receipts. One example of a GDR quoted on the LSE is EFG-Hermes, a leading investment bank in the Middle East and North Africa (MENA) region, which has a Bloomberg code of HRBG79:LN and where each GDR represents two local shares. Another example is Samsung Electronics Co ltd GDR, where each GDR represents 25 common stock.

For example, GDRs from 30 countries are quoted and traded on a section of the LSE (the International Order Book) and are settled in US dollars through Euroclear or the Depository Trust & Clearing Corporation (DTCC) depository bank.

Both Euroclear and DTCC will collect the dividend on the underlying share and then convert this into payments that can be paid out to the GDR holders. Any voting rights are exercised through the depository bank, but GDR holders are not able to take up rights issues and instead these are sold and the cash distributed.

Up to 20% of a company's voting share capital may be converted into depositary receipts. In certain circumstances, the custodian bank may issue depositary receipts before the actual deposit of the underlying shares. This is called a pre-release of the ADR and so trading may take place in this pre-release form. A pre-release is closed out as soon as the underlying shares are delivered by the depository bank.

6. World Stock Markets

Learning Objective

3.1.12 Know how shares are traded: on-exchange/over-the-counter; multilateral trading facilities; order-driven/quote-driven

A stock exchange is an organised marketplace for the issuing and trading of securities by members of that exchange. Stock exchanges have been around for hundreds of years and can be found in major cities across the world.

Companies with stocks traded on an exchange are said to be listed, and they must meet specific criteria, which vary across exchanges. Each exchange has its own rules and regulations for companies seeking a listing, and continuing obligations for those already listed.

Most stock exchanges began as physical meeting places, each with a trading floor where traders made deals face-to-face in an **open outcry** marketplace. However, most exchanges are now electronic, or at least partially electronic, as is the case with the NYSE (the only remaining major equity exchange with a physical trading floor). Trading is conducted through trading systems broadly categorised as either **quote-driven** or **order-driven**.

Quote-driven	• Quote-driven trading systems employ market makers to provide continuous two-way, or bid and offer, prices during the trading day in particular securities, regardless of market conditions. Market makers make a profit, or turn, through this price spread. • Compared to electronic order-driven systems, many practitioners argue that quote-driven systems provide liquidity to the market when trading would otherwise dry up. • NASDAQ is an example of a quote-driven, equity trading system.
Order-driven	• An order-driven market is one that employs either an electronic order book, such as the LSE's SETS (stock exchange electronic trading service), or an auction process, such as that on the NYSE floor, to match buyers with sellers. • In both cases, buyers and sellers are matched in strict chronological order by price and the quantity of shares being traded, and do not require market makers.

Most stock exchanges operate order-driven systems; how they operate can be seen by looking at the following:

- In order-driven systems, stock exchange member firms (investment banks and brokers) input orders via computer terminals. These orders may be for the member firms themselves, or for their clients.
- Very simply, the way the system operates is that these orders will be added to the buy queue or the sell queue, or executed immediately. Investors who add their order to the relevant queue are prepared to hold out for the price they want.
- Those seeking immediate execution will trade against the queue of buyers (if they are selling) or against the sellers' queue (if they are buying).

For a liquid stock, there will be a deep order book – the term 'deep' implies that there are lots of orders waiting to be dealt on either side. Below is an example of an order book screen from the LSE's SETS system.

Cumulative volume traded on and off order book during the current trading day
Sector/segment of the LSE trading system where the stock is traded
Volume weighted average price
VWAP for automated trades
Last trade price
Volume of shares traded automatically (on book)
Yellow strip: best buy/sell prices and corresponding volume and number of orders at that price
Market Maker executable quotes
Last 150.50 0.50 0.33%
02:36:37p Vol 975
CVol 587,673
ACVol 100,892
AMSM AS50 GB
Mid 150.25 0.13
Open 150.00 VWAP
High 150.50 AVWAP
Low 148.50 BidCls
PrClose 150.00 AskCls
Period OPEN GBX London
0.08% Div Status Headlines 0
150.01 EPS -16.76 Bid Ask
150.10 OLS 1 150.00 150.50
149.75 EMS 15000 02:41:55p 02:41:55p
150.50 Auct Timer
Oil & Gas Production Common stock
2 6,435 150.00 - 150.50 21,243 7
UnX Price 0.00 NUN UnX Vol 0 PrVol 793,673 Prv Close VWAP 151.80
Total Vol BUY is 136,357 35.51% Total Vol SELL is 247,595 64.49%
MF On Book (m) 15.14 MF Off Book (m) 73.01
Vol 5D Avg 1,261,744 Vol 30D Avg 1,877,495 Vol 90D Avg 2,174,250

To explain how the order book operates, the top of the queues for a share might look like this:

ABC Securities			
Buy Queue		Sell Queue	
We will buy for at most		We will sell for at least	
7,000 shares	1.24	3,500 shares	1.25
5,150 shares	1.23	1,984 shares (2)	1.26
19,250 shares (1)	1.22	75,397 shares (2)	1.26
44,000 shares (1)	1.22	17,300 shares	1.27

Queue priority is given on the basis of price and then time. So, for the equally priced orders noted (1), the order to buy 19,250 shares must have been placed before the 44,000 order – hence its position higher up the queue. Similarly, for the orders noted (2), the order to sell 1,984 shares must have been input before the order to sell 75,397 shares.

As an alternative to trading on a stock exchange in the US and Europe, trades can be conducted through multilateral trading facilities (MTFs) which have emerged as powerful competitors to traditional exchanges. Examples of MTFs include Refinitiv MTF and Turquoise.

As well as trading on a stock exchange or MTF, trades can also be executed away from the exchange directly between market counterparties. This is known as 'off-exchange' trading or over-the-counter (OTC) trading and is used, for example, where the size of the order from an institutional investor is too large to be executed on-exchange and the deal has to be negotiated with other potential investors.

7. Stock Market Indices

Learning Objective

3.1.11 Know the types and uses of the main global stock exchange indices

Markets worldwide compute one or more indices of prices of the shares of their country's listed companies. These indices provide a snapshot of how share prices are progressing across the whole group of constituent companies. They also provide a benchmark for investors, allowing them to assess whether their portfolios of shares are outperforming or underperforming the market in general.

Stock market indices were originally designed to provide an impressionistic mood of the market and, as such, were not constructed in a particularly scientific manner. In recent years, however, index construction has become more of a science, as performance measurement has come under increased scrutiny and the growth of index-related products has necessitated the need for more representative measures of market movements with greater transparency surrounding their construction.

Most stock market indices have the following four uses:

- To act as a market barometer. Most equity indices provide a comprehensive record of historic price movements, thereby facilitating the assessment of trends. Plotted graphically, these price movements may be of particular interest to technical analysts and momentum investors by assisting in identifying the right point to buy or sell securities, an approach referred to as 'market timing'.
- To assist in performance measurement. Most equity indices can be used as performance benchmarks against which portfolio performance can be judged.
- To act as the basis for index tracker funds, exchange-traded funds (ETFs), index derivatives and other index-related products.
- To support portfolio management research and asset allocation decisions.

As well as considering which market they are tracking, it is important to also understand how the index has been calculated. Early indices, such as the Dow Jones Industrial Average (DJIA), are price-weighted so that it is only the price of each stock within the index that is considered when calculating the index. This means that no account is taken of the relative size of a company contained within an index, and the share price movement of one can have a disproportionate effect on the index.

Following on from these earlier indices, broader-based indices were calculated based on a greater range of shares, and which also took into account the relative **market capitalisation** of each stock in the index to give a more accurate indication of how the market was moving. This development process is ongoing, and most market capitalisation-weighted indices have a further refinement in that they now take account of the free-float capitalisation of their constituents. This float-adjusted calculation aims to exclude shareholdings held by large investors and governments that are not readily available for trading.

An alternative method of calculating an index is the equal-weighted methodology. An equal investment in each stock in the index is assumed. This means that a percentage rise or fall in the share price of any of the constituent companies will have an equal impact on the value of the index.

There are now over 3,000 equity indices worldwide, some of which track the fortunes of a single market while others cover a particular region, sector or a range of markets. Some of the main indices that are regularly quoted in the financial press are shown below.

Region	Country	Index Name	Index Type
Americas	US	**Dow Jones Industrial Average (DJIA)** – provides a narrow view of the US stock market.	Price-weighted
		NASDAQ Composite – focuses on the shares traded on the NASDAQ, including many technology companies.	Market cap
		S&P500 (Standard & Poor's) – provides a wider view of the US stock market.	Market cap
Europe	UK	**FTSE 100** – an index of the largest 100 companies.	Market cap
	France	**CAC 40** – represents the 40 most significant stocks among the 100 largest market caps on Euronext Paris.	Market cap
	Germany	**Xetra DAX** – consisting of 30 major German companies trading on the Frankfurt Stock Exchange until 2021. The index now includes 40 companies.	Market cap
Asia Pacific	China	**Shanghai Stock Exchange (SSE) Composite Index** – reflects overall market performance of companies listed on SSE including stocks listed on China's NASDAQ-style sci-tech innovation board.	Market cap
		Shanghai Shenzhen CSI 300 Index – replicates the performance of the top 300 A share stocks quoted on the Shanghai and Shenzhen stock exchanges.	Market cap
	Hong Kong	**Hang Seng** – largest companies that trade on the Hong Kong Exchange, covering approximately 65% of its total market capitalisation.	Market cap
	Japan	**Nikkei 225** – contains the 225 top-rated Japanese companies listed in the First Section of the Tokyo Stock Exchange (TSE).	Price-weighted

8. Settlement Systems

Learning Objective

3.1.13 Know the method of holding title and related terminology: registered and bearer; immobilised and dematerialised

3.1.14 Understand the role of the central counterparty in clearing and settlement

3.1.15 Understand how settlement takes place: participants; process; settlement cycles

8.1 Methods of Holding Title

Shares can be issued in either registered or bearer form.

Holding shares in registered form involves the investor's name being recorded on the share register and, often, the investor being issued with a share certificate to reflect their ownership. However, many companies which issue registered shares now do so on a non-certificated basis.

The alternative to holding shares in registered form is to hold bearer shares. As the name suggests, the person who holds, or is the 'bearer' of, the shares is the owner. Ownership passes by transfer of the share certificate to the new owner. This adds a degree of risk to holding shares in that loss of the certificate might result in loss of the person's investment. As a result, holding bearer shares is relatively rare, especially in the UK. In addition, bearer shares are regarded unfavourably by the regulatory authorities owing to the opportunities they offer for money laundering. Consequently, they are usually immobilised in depositories such as Euroclear, or by their local country registries.

When a shareholder sells some, or all, of their shareholding, there must be a mechanism for updating the register to reflect the buyer and effect the change of ownership and for transferring the money to the seller. This is required in order to settle the transaction – accordingly, it is described as settlement.

Historically, each shareholder also held a share certificate as evidence of the shares they owned. When shares were sold, the seller sent their share certificate and a stock transfer form, providing details of the new owner, to the company registrar. Acting on these documents, the registrar would delete the seller's name and insert the name of the buyer into the register. The registrar then issued a new certificate to the buyer. This was commonly referred to as 'certificated settlement' because the completion of a transaction required the issue of a new share certificate. Certificated settlement is cumbersome and inefficient, and most markets have moved to having a single central securities depository which holds records of ownership, with transfer of ownership taking place electronically. Shares held in this way are said to be held in dematerialised (or demat) form.

8.2 Clearing and Central Counterparties

Clearing is the process through which the obligations held by the buyer and seller to a trade are defined and legally formalised. In simple terms, this procedure establishes what each of the counterparties expects to receive when the trade is settled. It also defines the obligations each must fulfil, in terms of delivering securities or funds, for the trade to settle successfully.

Specifically, the clearing process includes the following:

- Recording key trade information so that counterparties can agree on the trade's terms.
- Formalising the legal obligation between counterparties.
- Matching and confirming trade details.
- Agreeing procedures for settling the transaction.
- Calculating settlement obligations and sending out settlement instructions to the brokers, custodians and central securities depository (CSD).
- Managing margin and making margin calls. (Margin relates to collateral paid to the clearing agent by counterparties to guarantee their positions against default up to settlement.)

Trades may be cleared and settled directly between the trading counterparties – known as bilateral settlement. When trades are cleared bilaterally, each trading party bears a direct credit risk against each counterparty that it trades with. Hence, it will typically bear direct liability for any losses incurred through counterparty default.

The alternative is to clear trades using a central counterparty (CCP). A CCP interposes itself between the counterparties to a trade, becoming the buyer to every seller and the seller to every buyer. As a result, the buyer and seller interact with the CCP and remain anonymous to one another. This process is known as 'novation'.

Regulators are increasingly keen to promote the use of CCPs across a wide range of financial products. While this does not eliminate the risk of institutions going into default, it does spread this risk across all participants, and makes these risks progressively easier to monitor and regulate. The risk controls extended by a CCP effectively provide an early warning system to financial regulators of impending risks, and are an important tool in efforts to contain these risks within manageable limits.

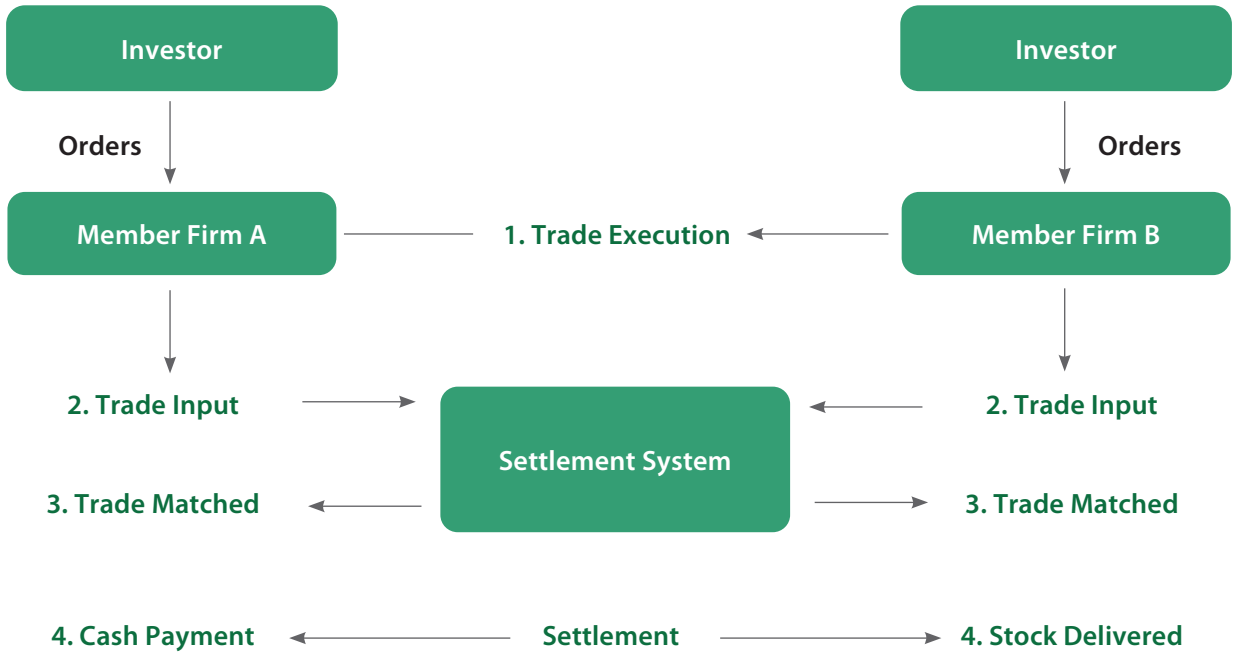
CCP services have been introduced in a range of markets in order to mitigate this risk. For example, LCH.Clearnet provides CCP services in the UK and Euronext for European markets trading in equity, derivatives and energy products.

8.3 Settlement

Settlement is the final phase of the trading process, and the generally accepted method is delivery versus payment (DvP), which requires the simultaneous exchange of stock and cash.

Electronic systems are used to achieve this by a process known as 'book-entry transfer', which involves changing electronic records of ownership rather than issuing new share certificates.

The exact process used for settlement will vary from country to country, but the following diagram illustrates the general principles of how a sale of shares between two counterparties on a recognised exchange is input, matched and settled.



1. Investors place their orders with a broker who is a member of the stock exchange and who will then execute the trade using the exchange's trading system.
2. Once the trade is executed, details of the trade are input to the settlement system by the broker or sent automatically from the trading system.
3. The settlement system checks that the two sets of instructions agree and, when that is the case, the trade is matched and ready for settlement on the intended settlement day.
4. On settlement day, the seller's account is credited with the proceeds of the sale and the securities are delivered to the buyer.

Settlement takes place once the trade instructions are matched and the intended settlement date is reached, provided that the seller has the stock to deliver and the buyer has the necessary cash. The intended settlement date will follow a settlement cycle that is standardised for each market. For example, European equity trades are settled at T+2 which means that the trade will settle two business days after the trade date – so, a trade executed on Monday should settle two business days later, on Wednesday. As previously noted, various markets have begun to move to T+1 settlement (including the US), and at the time of writing (December 2024), the EU is currently consulting to do the same.

End of Chapter Questions

Think of an answer for each question and refer to the appropriate section for confirmation.

1. **What are the features of a cumulative preference share?**
   Answer Reference: Section 1.3

2. **When a shareholder appoints someone to vote on their behalf at a company meeting, what is it referred to as?**
   Answer Reference: Sections 1.4.5 and 3.3

3. **What options are available to an investor in a rights issue?**
   Answer Reference: Section 3.2.1

4. **Under what type of corporate action would an investor receive additional shares without making any payment?**
   Answer Reference: Section 3.2.3 and 3.2.4

5. **What are the advantages and disadvantages to a company in obtaining a stock exchange listing?**
   Answer Reference: Section 4.1

6. **What is an ADR and for what purpose was it originally designed?**
   Answer Reference: Section 5

7. **What is the key characteristic of an order-driven trading system?**
   Answer Reference: Section 6

8. **What is the function of a stock market index?**
   Answer Reference: Section 7

9. **The CAC 40 index relates to which market?**
   Answer Reference: Section 7

10. **What is the meaning of DvP?**
    Answer Reference: Section 8.3

Chapter Four

Bonds

1. **Introduction** 83
2. **Characteristics of Bonds** 83
3. **Government Bonds** 90
4. **Corporate Bonds** 93
5. **Asset-Backed Securities (ABSs)** 98
6. **International Bonds** 101
7. **Yields** 102

This syllabus area will provide approximately 7 of the 50 examination questions

1. Introduction

In the previous chapter, we noted that companies can raise capital either through issuing equities (shares) or through borrowing. Although bonds do not often generate as much media attention as shares, they are the larger market of the two in terms of global investment value.

Bonds are roughly equally split between government and corporate bonds. Government bonds are issued by national governments and by supranational agencies such as the European Investment Bank and the World Bank. Corporate bonds are issued by companies, such as large banks and other large corporate listed companies.

2. Characteristics of Bonds

2.1 Definition of a Bond

Learning Objective

4.1.1 Understand the characteristics and terminology of bonds: coupon; redemption; nominal value; yields

A bond is, very simply, a form of borrowed debt, whereby a company or government borrows from market lenders.

A company or government that needs to raise money to finance, for example, an investment project, could borrow money from its bank or, alternatively, it could issue a bond to raise the funds it needs by borrowing from the investing public.

With a bond, an investor lends in return for the promise to have the loan repaid on a fixed date and (usually) a series of interest payments. Bonds may be referred to as **loan stock** (although these differ from loans), **debentures** (unsecured bonds) or (in the case of those which pay fixed income) fixed-interest securities.

The feature that distinguishes bonds from most loans is that a bond is a tradeable instrument with a secondary market, meaning investors can buy and sell bonds without going back to the original borrower. Although there is a wide variety of fixed rate securities in issue, they all share similar characteristics. These can be described by looking at an example of a US government bond – 1.875% Treasury bond 2041.

Nominal[1]	US$10,000
Stock[2]	Treasury bond
Coupon[3]	1.875%
Redemption date[4]	2041
Price[5]	US$96.18
Value[6]	US$9,618

Let us assume that an investor has purchased a holding of US$10,000 1.875% Treasury bond 2041 as shown in the table above.

Each of the terms in the table are explained here:

1. **Nominal** – this is the amount of stock purchased and should not be confused with the amount invested or the cost of purchase. This is the amount on which interest will be paid and the amount that will eventually be repaid. It is also known as the 'par' or 'face' value of the bond.
2. **Stock** – the name given to identify the stock and the borrower, which in this case is the US government. As will be seen later, the term 'Treasury bond' represents US government bonds issued with relatively long periods to maturity. However, the term is also used to describe bonds issued by many other countries.
3. **Coupon** – this is the amount of interest paid per year, expressed as a percentage of the face value of the bond. The bond issuer will pay the coupon to the bondholder. The rate is quoted gross and will normally be paid in two separate and equal half-yearly interest payments. The annual amount of interest paid is calculated by multiplying the nominal amount of stock held by the coupon; that is, in this case, US$10,000 multiplied by 1.875%.
4. **Redemption date** – this is the date at which the issue expires and the borrower will repay the lender the sum borrowed. Repayment of principal will take place at the same time that the final interest payment is made. The amount repaid will be the nominal amount of stock held which, in this case, is US$10,000. The redemption date is also known as the 'maturity date'.
5. **Price** – this stock can be freely traded at any time on the New York Stock Exchange (NYSE) and, as mentioned above, it is quoted at US$96.18. The convention in the bond markets is to quote stock per US$100 nominal of stock. In this example, the price quoted is US$96.18 and so each US$100 nominal of stock purchased will cost US$96.18 before any brokerage costs (note: a historic price is used as an example as prices can and do change).
6. **Value** – the value of the stock is calculated by multiplying the nominal amount of the stock by the current price (allowing for the price being per $100 nominal of stock), and so the holding has a market value of $9,618 – that is, the nominal value of $10,000 multiplied by the price of $96.18.

2.2 Advantages, Disadvantages and Risks of Investing in Bonds

Learning Objective

4.4.1 Know the potential advantages and disadvantages of investing in different types of bonds

As one of the main asset classes, bonds clearly have a role to play in most portfolios.

2.2.1 Advantages

Their main advantages are:

- for fixed interest bonds, a regular and certain flow of income
- for most bonds, a fixed maturity date (but there are bonds which have no redemption date, and others which may be repaid on either of two dates or between two dates – some at the investor's option and some at the issuer's option)
- a range of income **yields** to suit different investment and tax situations, and
- the relative security of capital for more highly rated bonds.

2.2.2 Disadvantages

Their main disadvantages are:

- the real value of the income flow is eroded by the effects of inflation (except in the case of index-linked bonds – see section 3.1 below), and
- bonds carry elements of risk (see section 2.2.3).

2.2.3 Risks

There are a number of risks attached to holding bonds, some of which have already been considered.

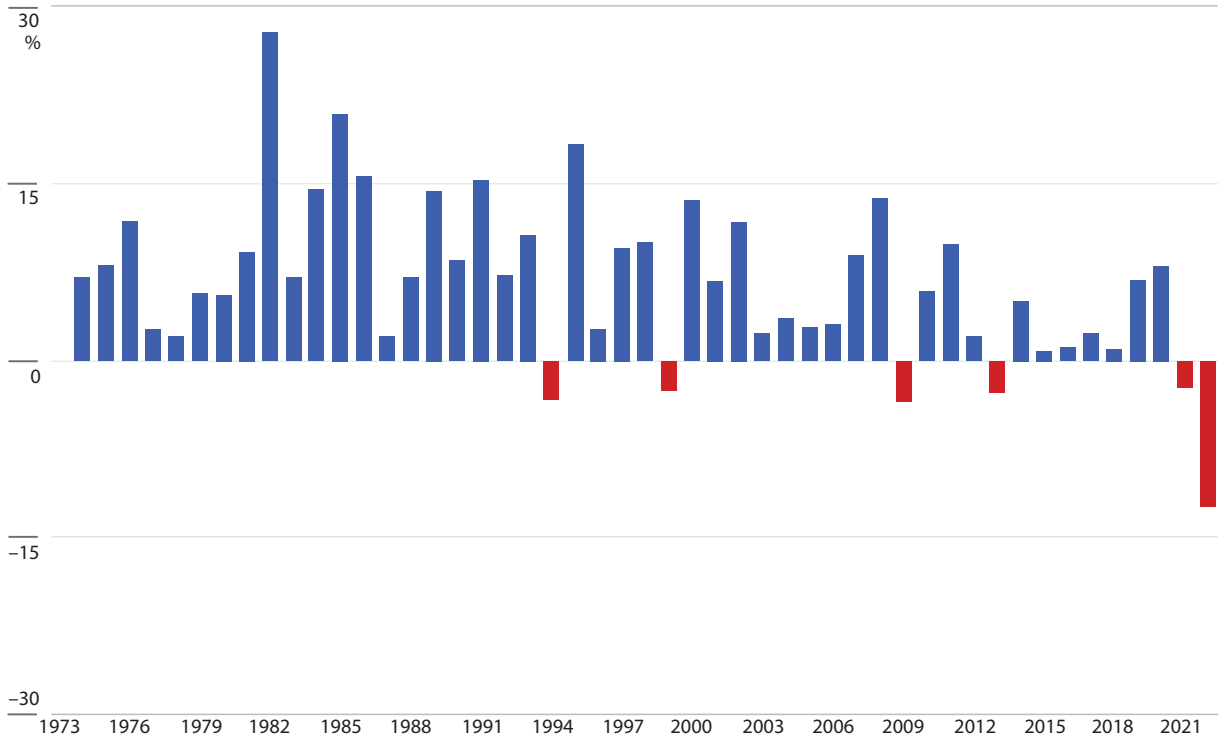
Bonds generally have default risk (the issuer might be a company that could go out of business and/or will not repay the capital at the maturity date) and price risk.

It used to be said that most government bonds had only price risk as there was little or no risk that the government would fail to pay the interest or repay the capital on the bonds.

Turmoil in government bond markets following the last financial crisis, however, resulted from fears that certain European governments might be unable to meet their obligations on these loans, and the prices of their bonds fell significantly as a result. More recently, the upward movements in interest rates in 2021–23 marked the end of the sustained performance from bonds seen since the 1990s, and interest rate risk remains a concern as prices will have to adjust to a new environment of higher inflation and rates.

Price (or market) risk is of particular concern to bondholders who are open to the effect of movements in general interest rates, which can have a significant impact on the value of their holdings. This can be illustrated by what happened to bond markets in 2021 and 2022. Since 1974, the Bloomberg US Aggregate Bond Index had two consecutive calendar years of negative returns for the first time. Before 2021, the index had seen negative returns only four times in total during the 46 years since the index had begun. Morningstar noted that '2022 was the first calendar year ever' to deliver a negative five-year annualised return.

Bloomberg Aggregate Bond (Calendar Returns)



Source: Bloomberg, Morningstar Direct. Data as of March 20, 2023

Bloomberg Aggregate Bond (5-Year Rolling Returns)

Source: Bloomberg, Morningstar Direct. Data as of March 20, 2023

This is best explained by two simple examples.

Example

Interest rates are approximately 5%, and the government issues a bond with a coupon rate of 5% interest. Three months later interest rates have doubled to 10%.

What will happen to the value of the bond?

The value of the bond will fall substantially. Its 5% interest is no longer attractive, so its resale price will fall to compensate and to make the return it offers more competitive.

Example

Interest rates are approximately 5%, and the government issues a bond with a coupon rate of 5% interest. Interest rates generally fall to 2.5%.

What will happen to the value of the bond?

The value of the bond will rise substantially. Its 5% interest is very attractive, so its resale price will rise to compensate and make the return it offers fall to more realistic levels.

As the above examples illustrate, there is an inverse relationship between interest rates and bond prices:

- If interest rates increase, bond prices will decrease.
- If interest rates decrease, bond prices will increase.

As long as the interest being paid on the government bond is near to the interest rate available on the market, there is little risk that the resale value will be significantly different from the purchase price. In other words, bonds will have price risk or market risk only when the coupon rate of interest differs markedly from market rates.

Detailed below are some of the other main types of risk associated with holding bonds.

- **Early redemption** – the risk that the issuer may invoke a call provision and redeem the bond early (if the bond is callable – see section 4.1.2).
- **Seniority risk** – this relates to the seniority with which corporate debt is ranked in the event of the issuer's liquidation. If the company raises more borrowing and it is entitled to be repaid before the existing bonds, then the bonds have suffered from seniority risk.
- **Inflation risk** – the risk of inflation rising unexpectedly and eroding the real value of the bond's coupon and redemption payment.
- **Liquidity risk** – liquidity is the ease with which a security can be converted into cash. Some bonds are more easily sold at a fair market price than others.
- **Exchange rate risk** – bonds denominated in a currency different from that of the investor's home currency are potentially subject to adverse exchange rate movements.

2.3 Credit Rating Agencies

Learning Objective

4.4.3 Understand the role of credit rating agencies and the difference between investment and non-investment grades

The credit risk, or probability of an issuer defaulting on their payment obligations, and the extent of the resulting loss, can be assessed by referring to the independent credit ratings given to most bond issues.

There are more than 70 agencies throughout the world, and preferred agencies vary from country to country. The three most prominent credit rating agencies are:

- Standard & Poor's (S&P)
- Moody's, and
- Fitch Ratings.

The table below shows the credit ratings available from the three companies.

Bond Credit Ratings				
Credit Risk		Moody's	Standard & Poor's	Fitch Ratings
Investment Grade				
Highest quality		Aaa	AAA	AAA
High quality	Very strong	Aa	AA	AA
Upper medium grade	Strong	A	A	A
Medium grade		Baa	BBB	BBB
Non-Investment Grade				
Lower medium grade	Somewhat speculative	Ba	BB	BB
Low grade	Speculative	B	B	B
Poor quality	May default	Caa	CCC	CCC
Most speculative		C	CC	CC
No interest being paid or bankruptcy petition filed		C	D	C
In default		C	D	D

Standard & Poor's and Fitch Ratings refine their ratings by adding a plus or minus sign to show relative standing within a category, while Moody's does the same by the addition of a 1, 2 or 3.

As can be seen, bond issues, subject to credit ratings, can be divided into two distinct categories: those accorded an investment grade rating, and those categorised as non-investment grade, or speculative. The latter are also known as 'high-yield' or – for the worst-rated – 'junk' bonds. Investment grade issues offer the greatest liquidity and certainty of repayment. (Note that these terms are not actually used by the agencies but inferred by industry practice.)

Very few organisations, with the exception of supranational agencies and some western governments, are awarded a triple-A rating, though the bond issues of most large corporations boast a credit rating within the investment grade categories.

Bonds will be assessed and given a credit rating when they are first issued and then reassessed if circumstances change so that their rating can be upgraded or downgraded with a consequent effect on their price.

3. Government Bonds

Learning Objective

4.2.1 Know the definition and features of government bonds: types; US; UK; China; Germany; Japan

Governments issue bonds to finance their spending and investment plans and to bridge the gap between their actual spending and the tax and other forms of income that they receive. Issuance of bonds is high when tax revenues are significantly lower than government spending.

Western governments are major borrowers of money, so the volume of government bonds in issue is very large and forms a major part of the investment portfolio of many institutional investors (such as pension funds and insurance companies).

The following sections provide a brief review of the characteristics of selected government bond markets for the most widely traded government bonds.

3.1 US

The US government bond market is the largest and most liquid in the world. Government bonds issued by the US government are generally known as Treasuries and there are four main marketable types, namely: Treasury bills, Treasury notes, Treasury bonds and Treasury inflation-protected securities.

- **Treasury bills** – also known as T-bills, are a money market instrument used to finance the government's short-term borrowing needs. They have maturities of less than a year and are typically issued with maturities of 28 days, 91 days, 182 days and 365 days. They are zero coupon instruments that pay no interest and instead are issued at a discount to their par value. Once issued, they trade in the secondary market and are priced on a yield-to-maturity basis.
- **Treasury notes** – conventional government bonds that have a fixed coupon and redemption date. They have maturity dates between one and ten years from their issue date. They are commonly issued with maturities of two, five and ten years.
- **Treasury bonds** – again conventional government bonds, but with maturities of more than ten years from their issue date; most commonly issued with typical maturities of 20 to 30 years.
- **Treasury inflation-protected securities** – these are index-linked bonds and are referred to as TIPS. The principal value of the bond is adjusted regularly, based on movements in the consumer price index (CPI) to account for the impact of inflation. Interest payments are paid half-yearly and, unlike the UK version, the coupon remains constant but is paid on the changing principal value.

STRIPS (separate trading of registered interest and principal securities) are also traded based on the stripped elements of Treasury notes, bonds and TIPS. Each bond is broken down into its underlying cash flows – that is, each individual interest payment plus the single redemption payment. Each is then traded as a separate **zero coupon bond (ZCB)**.

US Treasuries are traded for settlement the next day. They have been issued in book-entry form since 1986 – that is, entry on the bond register and transfers can only take place electronically and no physical bond certificates are issued. Interest is paid on a semi-annual basis.

In addition to government bonds, federal agencies and municipal authorities also issue bonds. Some of the biggest issuers of bonds are Fannie Mae and Freddie Mac, which issue bonds to support house purchase activity.

Municipal bonds are issued by states, cities, counties and other government entities to raise money to build schools, highways, hospitals and sewer systems, as well as many other projects. Interest is usually paid semi-annually, and many are exempt from both federal and state taxes.

3.2 UK

UK government bonds are known as gilts. Historically, when physical certificates were issued, they used to have a gold or gilt edge to them; hence, they are known as 'gilts' or 'gilt-edged stock'. The bonds are issued on behalf of the government by the Debt Management Office (DMO).

Conventional government bonds are instruments that carry a fixed coupon and a single repayment date, such as 0.129% Treasury Gilt 2029. This type of bond represents the majority of government bonds in issue.

The other main type of bond issued by the UK government is index-linked bonds. Index-linked bonds are bonds where the coupon and the redemption amount are adjusted in line with movements in the General Index of Retail Prices (RPI); they are similar to the US TIPS.

As well as categorising government bonds by type, another common division is by how many years remain until redemption. UK government stocks are classified into the following:

- Zero–three years remaining: ultra short-dated
- Three–seven years remaining: short-dated
- Seven–15 years remaining: medium-dated
- 15 years and over remaining: long-dated.

In 2005, the DMO issued new gilts with redemption dates 50 years from the date of issue for the first time. Although these are classified within the banding of 15 years and over, they are often referred to as ultra-long gilts. Gilts are traded for settlement the next day. Settlement takes place electronically and transfers take place by book entry. Interest is paid on a semi-annual basis.

3.3 Germany

The main types of German government bonds are *Bunds*, *Schatz* and *Bobls*. Bunds are longer-term instruments; Schatz are issued with two-year maturities; Bobls are issued with five-year maturities.

Bunds are issued with maturities of between eight and 30 years, but the most common maturity is ten years. The Bund market is large and liquid, and the yield on Bunds sets the benchmark for other European government bonds. Domestic trades settle two business days after trade date. Settlement of international trades follows the practice in the **eurobond** market and is for T+2 settlement, that is two business days after the trade date. All settlement takes place electronically by book entry. Interest on Bunds is paid on an annual basis.

3.4 China

China has the third largest bond market in the world. From 2019, the country's onshore bonds were included in the Bloomberg Barclays Global Aggregate Index, which portfolio managers around the world use as a benchmark. Commentators suggest that with inclusion in this index, it will not be long before China has the second biggest bond market behind the US.

- Sovereign government bonds are issued by the Ministry of Finance and typically have maturities between three months and 50 years.
- Policy bank bonds are quasi-sovereign bonds issued by the China Development Bank, the Agricultural Development Bank of China and the Export-Import Bank of China. They, typically, have maturities of between six months and 50 years, and carry slightly higher yields than government bonds.
- The third major sector of the market is local government bonds that are issued by provincial and local governments, which typically have maturities of between one and ten years. These demonstrate greater differentiation based on the credit quality of the issuer and their fiscal position.

3.5 Japan

The Japanese government bond market is one of the largest in the world and its bonds are usually referred to as JGBs.

JGBs are classified into six categories:

- Short-term bonds
- Medium-term bonds
- Long-term bonds
- Super-long-term bonds
- Individual investor bonds
- Inflation-indexed bonds.

Short-term JGBs have maturities of six months and one year and are issued as ZCBs; in other words they are issued at a discount, carry no interest and are repaid at their face value. Other JGBs are available with various maturity periods. Coupon-bearing bonds, which feature semi-annual interest payment and principal payment at maturity, have maturities as follows:

- Fixed-rate coupon-bearing bonds: 2, 5, 10, 20, 30 and 40 years
- Inflation-indexed bonds: 10 years
- Floating-rate bonds: 15 years
- JGBs for retail investors: 3, 5 and 10 years.

Inflation-indexed bonds operate in a similar way to TIPS, that is, the principal amount is inflation-adjusted, based on movements in the CPI, and the coupon is fixed but payable on the inflation-adjusted principal amount. Not all bonds are listed, and most trading takes place in the OTC market. Settlement varies depending upon the type of trade – JGBs moved to T+1 settlement in the first half of 2018 and corporate bonds moved to T+2 settlement in July 2019.

3.6 Primary Market Issuance

Government bonds are usually issued through agencies that are part of that country's Treasury department.

Example

In the UK, when a new gilt is issued, the process is handled by the Debt Management Office (DMO) which is the agency acting on behalf of the Treasury, the UK's finance ministry.

Issues are typically made in the form of an auction, where large investors (such as banks, pension funds and insurance companies) submit competitive bids. Often, they will each bid for several million pounds' worth of an issue. Issue amounts are normally between £0.5 billion and £2 billion. The DMO accepts bids from those prepared to pay the highest price. Smaller investors are able to submit non-competitive bids. To do so, they must be accepted as members of the Approved Group of Investors and undergo anti-money laundering checks. Non-competitive bids can be submitted for up to £500,000, and the applicant will pay the average of the prices paid by competitive bidders.

The issuers for the government bonds described above are as follows:

- US: Bureau of the Fiscal Service
- UK: Debt Management Office
- Germany: Finanzagentur GmbH
- China: Ministry of Finance
- Japan: Ministry of Finance.

4. Corporate Bonds

Learning Objective

4.3.1 Know the definitions and features of the following types of bond: domestic; foreign; eurobond; asset-backed securities including covered bonds; zero coupon; hybrids (convertible/preferred); floating rate notes; medium-term notes

A corporate bond is a bond that is issued by a company, as the name suggests.

The term is usually applied to longer-term debt instruments with a maturity date of more than 12 months. The term 'commercial paper' (see chapter 5, section 2) is used for instruments with a shorter maturity. Only companies with high credit ratings can issue bonds with a maturity greater than ten years at an acceptable cost. Most corporate bonds are listed on stock exchanges, but the majority of trading in most developed markets takes place in the over-the-counter (OTC) market – that is directly between market counterparties.

4.1 Features of Corporate Bonds

There is a wide variety of corporate bonds and they can often be differentiated by looking at some of their key features, such as:

- security, and
- redemption provisions.

4.1.1 Bond Security

When a company is seeking to raise new funds by way of a bond issue, it will often have to offer security to provide the investor with some guarantee for the repayment of the bond. In this context, security usually means some form of charge over the issuer's assets (eg, its property or trade assets) so that, if the issuer defaults, the bondholders have a claim on those assets before other creditors (and so can regard their borrowings as safer than if there were no security). In some cases, the security takes the form of a third-party guarantee – for example, a guarantee by a bank that, if the issuer defaults, the bank will repay the bondholders.

The greater the security offered, the lower the cost of borrowing should be.

The security offered may be fixed or floating. Fixed security implies that specific assets (eg, a building) of the company are charged as security for the loan. A floating charge means that the general assets of the company are offered as security for the loan; this might include cash at the bank, trade debtors or stock.

4.1.2 Redemption Provisions

In some cases, a corporate bond will have a call provision which gives the issuer the option to buy back all or part of the issue before maturity. These bonds are known as callable bonds.

This is attractive to the issuer as it gives it the option to refinance the bond (ie, replace it with one at a lower rate of interest) when interest rates are lower than the coupon currently being paid. This is a disadvantage, however, to the investor, who will probably demand a higher yield as compensation. Call provisions can take various forms. There may be a requirement for the issuer to redeem a specified amount at regular intervals. This is known as a sinking fund requirement.

Some bonds are issued with put provisions and are known as puttable bonds; these give the bondholder the right to require the issuer to redeem early, on a set date or between specific dates. This makes the bond attractive to investors and may increase the chances of selling a bond issue in the first instance. It does, however, increase the issuer's risk that it will have to refinance the bond at an inconvenient time.

4.2 Types of Corporate Debt

There is a large variety of corporate debt being issued and traded. Some of the main types are described below.

4.2.1 Medium-Term Notes (MTNs)

MTNs are standard corporate bonds with maturities up to five years, though the term is also applied to instruments with maturities as long as 30 years. How MTNs differ from other debt instruments is that they are offered to investors continually over a period of time by an agent of the issuer instead of in a single tranche of one sizeable underwritten issue.

The market originated in the US to close the funding gap between commercial paper and long-term bonds.

Example

An example of an MTN is one issued by the UK supermarket group Tesco. As part of a larger financing programme, it issued a £200 million tranche of 6% sterling-denominated notes in 1999 which are repayable in 2029.

This bond contains an example of an investor put provision. It provides that, if there is a restructuring event (which for this bond is if anyone becomes entitled to more than 50% of the voting rights in the company), and this results in a rating downgrade, then holders of the bonds can give notice to Tesco requiring it to redeem the bond at par together with any accrued interest.

4.2.2 Fixed-Rate Bonds

The key features of fixed-rate bonds have already been described above in section 2.1. Essentially, they have fixed coupons, which are paid either half-yearly or annually, and predetermined redemption dates.

4.2.3 Floating Rate Notes (FRNs)

Floating rate notes (FRNs) are bonds that have variable rates of interest. In this respect, they typically behave most closely with variable rate loans given the coupon amount fluctuates over time as market rates change.

The rate of interest will typically be linked to a benchmark rate, such as SOFR (Secured Overnight Financing Rate) in the US and SONIA (Sterling Overnight Index Average) in the UK. These are the replacements for LIBOR, and are now often used as a basis for financial instrument cash flows, including FRNs.

An FRN will usually pay interest at the benchmark rate plus a quoted margin or spread.

4.2.4 Hybrids

In the context of finance, the term 'hybrid security' refers to a financial instrument that can have characteristics of both equity and debt securities. These instruments combine elements of equity and debt, offering investors a unique combination of features. Hybrid securities are often created to meet specific financing or investment objectives and can take various forms. Two types of hybrid securities are **convertible bonds** and preferreds.

Convertible bonds are issued by companies. They give the investor holding the bond two possible choices:

- To simply collect the interest payments and then the repayment of the bond on maturity.
- To convert the bond into a predefined number of ordinary shares in the issuing company, on a set date or dates, or between a range of set dates, prior to the bond's maturity.

The attractions to the investor are as follows:

- If the company prospers, its share price will rise and, if it does so sufficiently, conversion may lead to capital gains.
- If the company hits problems, the investor can retain the bond – interest will be earned and, as bondholder, the investor will rank ahead of existing shareholders if the company goes bankrupt. Of course, if the company were seriously insolvent and the bond were unsecured, the bondholder might still not be repaid – but this is a possibility more remote than that of a full loss as a shareholder.

For the company, relatively cheap finance is acquired. Investors will pay a higher price for a bond that is convertible because of the possibility of a capital gain. However, the prospect of dilution of current shareholder interests, as convertible bondholders exercise their options, has to be borne in mind.

Preferred bonds, also known as 'preferreds' (more common in the US than the UK), have similar characteristics to preference shares and bonds and have the potential to offer investors higher yields than holding the company's ordinary shares or bonds. As noted previously in the Equities chapter (chapter 3), these should not be confused with preference shares (UK) or preferred stocks (US). They are essentially bonds with equity-like features and are generally issued by large banks and insurance companies. They are usually undated/perpetual and carry callable rights for the issuer within the first five to ten years of issuance. A specific equity-like feature is the fact that these pay dividends as opposed to coupons as with other bonds. Within the issuer's capital structure, preferreds rank lower than senior debt but higher than equity.

4.2.5 Zero Coupon Bonds (ZCBs)

Zero coupon bonds (ZCBs) pay no interest. As seen, 'coupon' is an alternative term for the interest payment on a bond. The example below illustrates why a ZCB may be attractive.

Example

Imagine that the issuer of a bond (Example plc) offered you the opportunity to purchase a bond with the following features:

- €100 nominal value
- Issued today
- Redeems at its par value (that is €100 nominal value) in five years
- Pays no interest.

Would you be interested in purchasing the bond?

It is tempting to say no – who would want to buy a bond that pays no interest?

However, there is no requirement to pay the par value – a logical investor would presumably be happy to pay a lesser amount than the par value, for example €90. The difference between the price paid of €90 and the par value of €100 recouped after five years would provide the investor with their return of €10 over five years.

As the example illustrates, these ZCBs are issued at a discount to their par value and they repay, or redeem, at par value. All of the return is provided in the form of capital growth rather than income and, as a result, it may be treated differently for tax purposes.

5. Asset-Backed Securities (ABSs)

Learning Objective

4.3.1 Know the definitions and features of the following types of bond: domestic; foreign; eurobond; asset-backed securities including covered bonds; zero coupon; hybrids (convertible/preferred); floating rate notes; medium-term notes

5.1 Asset-Backed Securities (ABSs)

There is a large group of bonds that trade under the overall heading of asset-backed securities (ABSs).

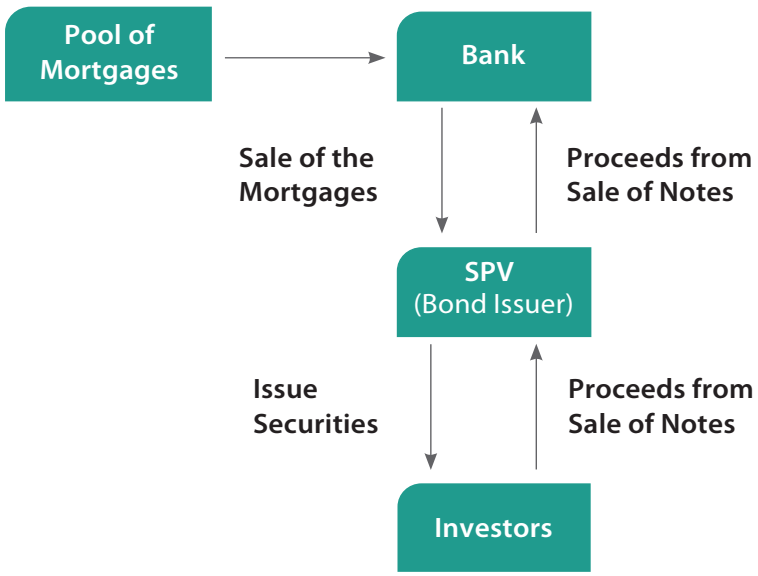
These are bundled securities, so called because they are marketable securities that result from the bundling or packaging together of a set of non-marketable assets.

The assets in this pool, or bundle, range from mortgages and credit card debt to accounts receivable. The largest market is for mortgage-backed securities, which became known worldwide as a result of the sub-prime collapse in the US.

Mortgage-backed securities are created by bundling or pooling together a set of mortgages and then issuing bonds that are backed by this pool of assets. These bonds are sold on to investors, who receive interest payments until they are redeemed.

Creating a bond in this way is known as securitisation, and it began in the US in 1970 when the government first issued mortgage certificates – a security representing ownership of a pool of mortgages. As they were issued by government agencies, they carried guarantees and little risk and so were attractive to investors. This process spread, with banks using them to finance their mortgage-lending, generally by issuing bonds representing ownership of a pool of mortgages with sound credit quality. Eventually the appetite for bonds with lower credit quality and the potential for greater returns grew, and banks started to issue mortgage bonds backed by sub-prime loans.

The way in which securitisation operates can be seen by looking at mortgage-backed bonds as an example in the following simplified diagram:



A set of mortgages packaged together by a bank is sold to a new company specifically set up for that purpose: a special purpose vehicle (SPV). The SPV will then issue bonds which will have the security of the original mortgages along with different forms of credit enhancement, such as guarantees from the bank, insurance and over-collateralisation.

The bank receives the proceeds of the sale which it can then use to finance other lending. The investor receives a bond that has the security of asset backing and credit enhancements and on which they will receive periodic interest payments until its eventual repayment.

As we can see from this process, the advantages to the bank are as follows:

- Total funding available to the bank is increased by accessing capital markets rather than being dependent solely on its traditional deposit base.
- The mortgages are removed from its balance sheet and its risk exposure is diversified to another lender.
- Its liquidity position is helped, as the term to maturity of a mortgage may be 25 years and the securitisation issue replaces the financing that may have come from deposits that can be withdrawn at short notice.

From the investor's point of view, mortgage-backed bonds offer the following benefits:

- They are a marketable asset-backed instrument to invest in.
- Original mortgages will provide good security if well diversified and equivalent in terms of quality, terms and conditions.
- Credit enhancements make the securitised bonds a better credit risk.

A significant advantage of ABSs is that they bring together a pool of financial assets that otherwise could not easily be traded in their existing form. The pooling together of a large portfolio of these illiquid assets converts them into instruments that may be offered and sold freely in the capital markets.

Their drawback was brought vividly to light in the sub-prime crisis. In normal circumstances, a pool of mortgages with high credit quality will provide a diversified spread of risk for bond investors. What happened in the sub-prime crisis is that poor quality (or sub-prime) mortgages were added to the mortgage pool, which left them vulnerable to the downturn in the US property market.

The result saw bond prices collapse and banks take huge losses as the downturn in the property market hit their own mortgage book and because of the guarantees provided to the SPVs. The bonds had been sold to investors worldwide, who saw sharp falls in the value of their holdings, including many that were judged as safe by the ratings agencies.

5.2 Covered Bonds

A variation on ABSs is covered bonds which are widely used in Europe.

These are issued by financial institutions and are corporate bonds that are backed by cash flows from a pool of mortgages or public sector loans. The pool of assets provides 'cover' for the loan, hence the term 'covered bond'.

They are similar in many ways to ABSs, but the regulatory framework for covered bonds is designed so that bonds that comply with those requirements are considered as particularly safe investments. The main differences are as follows:

- The assets remain on the issuer's balance sheet.
- The asset pool must provide sufficient collateral to cover bondholder claims throughout the whole term of the covered bond.
- Bondholders must have priority claim on the asset pool in case of default of the issuer.

Covered bonds are an important part of the financing of the mortgage and public sector markets in Scandinavia and Europe and represent a vital source of term funding for banks. A thriving covered bond market is seen as essential for the future of the European banking sector and the ability of individuals to finance house loans at a reasonable rate.

6. International Bonds

Learning Objective

4.3.1 Know the definitions and features of the following types of bond: domestic; foreign; eurobond; asset-backed securities including covered bonds; zero coupon; hybrids (convertible/preferred); floating rate notes; medium-term notes

In this section, we will consider the main types of international bonds that are issued.

6.1 Domestic and Foreign Bonds

Bonds can be categorised geographically. A domestic bond is issued by a domestic issuer into the domestic market, for example, a UK company issuing bonds, denominated in sterling, to UK investors.

In contrast, a foreign bond is issued by an overseas or foreign entity into a domestic market and is denominated in the domestic currency. Examples of a foreign bond are a German company issuing a sterling bond to UK investors or a US dollar bond issued in the US by a non-US company.

6.2 Eurobonds

Although the first Eurobond was issued in 1963, the eurobond market developed rapidly and expanded in volume in the early 1970s to accommodate the recycling of substantial Organization of Petroleum Exporting Countries (OPEC) US dollar revenues from Middle East oil sales at a time when US financial institutions were subject to a ceiling on the rate of interest that could be paid on dollar deposits. Since then, it has grown exponentially into the world's largest market for longer-term capital as a result of the corresponding growth in world trade and even more significant growth in international capital flows. Most of the activity is concentrated in London.

Eurobonds are large international bond issues often made by governments and multinational companies in a currency which is not the currency of the country in which it is issued.

Often issued in a number of financial centres simultaneously, the one defining characteristic of eurobonds is that they are denominated in a currency different from that of the financial centre or centres from which they are issued. An example might be a German company issuing either a euro, a dollar or a sterling bond to Japanese investors.

In this respect, the term eurobond is a bit of a misnomer as eurobond issues and the currencies in which they are denominated are not restricted to those of European financial centres or countries.

The 'euro' prefix simply originates from the depositing of US dollars in the European eurodollar market and has been applied to the eurobond market since then. So, a euro sterling bond issue is one denominated in sterling and issued outside the UK, though not necessarily in a European financial centre. Eurobonds issued by companies often do not provide any underlying collateral, or security, to the bondholders but are almost always rated by a credit rating agency.

To prevent the interests of these bondholders being subordinated, or made inferior, to those of any subsequent bond issues, the company makes a 'negative pledge' clause. This prevents the company making any secured bond issues, or issues which confer greater seniority (ie, priority) or entitlement to the company's assets in the event of its liquidation, unless an equivalent level of security is provided to existing bondholders.

The eurobond market offers a number of advantages over a domestic bond market that make it an attractive way for companies to raise capital, including:

- a choice of innovative products to more precisely meet issuers' needs
- the ability to tap potential lenders internationally, rather than just domestically
- anonymity to investors as issues are made in bearer form
- gross interest payments to investors
- lower funding costs due to the competitive nature and greater liquidity of the market
- the ability to make bond issues on short notice, and
- less regulation and disclosure.

Most eurobonds are issued as conventional bonds (or 'straights'), with a fixed nominal value, fixed coupon and known redemption date. Other common types include FRNs, ZCBs, convertible bonds and dual-currency bonds (for example, these may have their par value in one currency and coupon payments in another) – but they can also assume a wide range of other innovative features.

7. Yields

Learning Objective

4.4.2 Be able to calculate the flat yield of a bond

Yields are a measure of the returns to be earned on bonds.

The coupon reflects the interest rate payable on the nominal or principal amount. However, an investor may have paid a different amount to purchase the bond, so a method of calculating the true return is needed. The return, as a percentage of the cost price, which a bond offers is often referred to as the bond's yield, while the interest paid on a bond as a percentage of its market price is referred to as the flat, or running, yield.

The flat yield is calculated by taking the annual coupon and dividing by the bond's price, and then multiplying by 100 to obtain a percentage.

The bond's price is, typically, stated as the price payable to purchase US$100 nominal value or whichever currency the bond is dealt in.

Example

Staying with our example from section 2.1 of a US Treasury bond with a 1.875% coupon that is due to be redeemed at par in 2041, and is currently priced at US$96.18, this would have a flat yield of:

$$\left(1.875 \div 96.18\right) \times 100 = 1.95\%$$

However, the interest earned on a bond is only one part of its total return, as the investor may also either make a capital gain or a loss on the bond if they hold it until redemption.

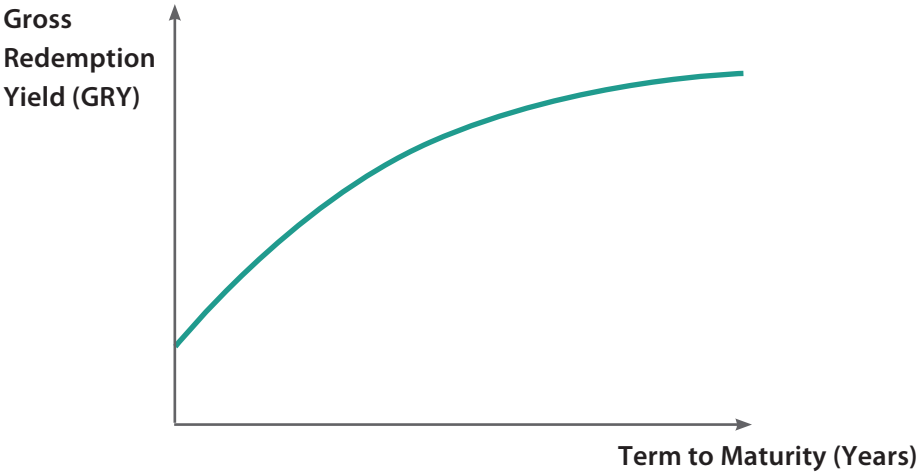
Staying with the example of the US Treasury stock used above, it was purchased for US$96.18 but will repay US$100 when it is repaid in 2041. So, if an investor holds the bond until repayment, they will receive an interest return each year and will make a capital gain, and so a measure is needed to take this into account.

The redemption yield or yield to maturity is a measure that incorporates both the income and capital return – assuming the investor holds the bond until its maturity – into one figure.

Simply put, the yield to maturity is a combination of the flat yield plus the gain or loss that will occur if the bond is held until it is redeemed to give an average annual compound return. In the example above of a 1.875% US Treasury Bond priced at 96.18, the yield to maturity will be higher than the flat yield, as the market price is lower than the bond's par value, and the bond will have a capital gain if held to maturity. If, however, the market price was above par, then the yield to maturity would be less than the flat yield as a capital loss would be made if the bond were held to maturity.

The yield to maturity (or gross redemption yield) gives a more accurate indication of the return that the investor receives and can be used to compare the yields from different bonds to identify which is offering the best return.

7.1 Yield Curve



The **yield curve**, as shown in the diagram above, is a way of illustrating the different rates of interest that can be obtained in the market for similar debt instruments with different maturity dates. Although yield curves can assume a range of different shapes, in normal market circumstances the yield curve is described as being 'positive', ie, it slopes upward, as in the diagram.

The rationale for this is that the longer an investor is going to tie up capital, the higher the rate of interest they will demand to compensate themselves for the greater risk and opportunity cost on the capital they have invested.

End of Chapter Questions

Think of an answer for each question and refer to the appropriate section for confirmation.

1. **Explain the following terms in relation to a bond: nominal value, coupon, redemption date and price.**
   Answer Reference: Section 2.1

2. **What are some advantages of investing in bonds?**
   Answer Reference: Section 2.2.1

3. **Explain 'inflation risk' in relation to bonds.**
   Answer Reference: Section 2.2.3

4. **What will be the impact of a fall in interest rates on bond prices?**
   Answer Reference: Section 2.2.3

5. **How frequently do credit rating agencies assign credit ratings to bonds?**
   Answer Reference: Section 2.3

6. **What are the main characteristics of Treasury bills?**
   Answer Reference: Section 3.1

7. **What is the function of a call provision when attached to a bond?**
   Answer Reference: Section 4.1.2

8. **What options do a convertible bond give to an investor?**
   Answer Reference: Section 4.2.4

9. **What type of bond does not pay interest?**
   Answer Reference: Section 4.2.5

10. **You have a holding of $1,000 Treasury 1.5% stock 2030 which is priced at $101.15. What is its flat yield?**
    Answer Reference: Section 7

Chapter Five

Other Markets and Investments

1. **Cash Deposits** 109
2. **Money Markets** 115
3. **Foreign Exchange (Forex or FX)** 118
4. **Property** 122

This syllabus area will provide approximately 5 of the 50 examination questions

1. Cash Deposits

Learning Objective

5.1.1 Know the characteristics of fixed-term and instant access deposit accounts

5.1.2 Know the advantages and disadvantages of investing in cash

5.1.3 Know the differences between cryptocurrencies and fiat currencies

Having explored equities and bonds in the previous chapters, it would be easy to overlook the most important asset class – money. This chapter focuses on cash deposits, the money market and foreign exchange (FX). We will conclude the chapter with the property market.

Cash deposits comprise accounts held with banks or other savings institutions. They are held by a wide variety of depositors – from retail investors through to companies, governments and financial institutions.

The main characteristics of cash deposits are:

- the return simply comprises interest income with no potential for capital growth, and
- the amount invested (the capital) is repaid in full at the end of the investment term.

Some accounts are known as instant access, and the money can be withdrawn at any time. Other accounts are for a fixed term of a year or more, while others require notice to be given before monies can be withdrawn. The interest rate paid on deposits will vary with the amount of money deposited and the time for which the money is tied up. The rate will also vary because of competition, as deposit-taking institutions will compete intensely with one another to attract new deposits.

- Large deposits are more economical for a bank to process and will earn a better rate.
- Fixed-term accounts involve the investor tying up their money for a fixed period of time such

as one, two or three years, or where a fixed period of notice has to be given, such as 30 days, 60 days or 90 days. In exchange for tying up their funds for these periods, the investor will demand a higher rate of interest than would be available on accounts that permit immediate access.
- Instant access deposit accounts typically earn the lowest rates of interest of the various deposit accounts available.
- Current (US: checking) accounts will generate an even lower rate, and sometimes pay no interest at all.

Generally, interest received by an individual is subject to income tax. In many countries, tax is deducted at source – that is, by the deposit-taker before paying the interest to the depositor. The 'headline' rate of interest quoted by deposit-takers, before deduction of tax, is referred to as gross interest, and the rate of interest after tax is deducted is referred to as net interest.

Islamic Savings Accounts

Islamic savings accounts differ in their approach. The moral principles many Muslims live their lives by are sometimes known as the Shariah, so you may see Islamic financial services described as 'Islamic finance' or 'Shariah compliant'.

A key element of Islamic finance is that paying or receiving interest should be avoided and that where possible, risk should be shared. This affects how savings accounts operate. If an investor deposits money in a Shariah-compliant savings account, the bank will invest their money avoiding anything the Shariah says is harmful. The key difference is that it will not earn any interest and instead the bank will pay a share of the profits from the investment.

Accounts that operate in this way usually advertise an expected profit rate which tells you the percentage return the bank expects to pay; this rate, however, is not guaranteed and depends on the profits that the bank makes. It is important to be aware that this profit rate is not guaranteed, but it is highly unusual to receive less than the advertised rate due to competitive and, in some cases, regulatory pressure. If the profit rate should decrease, the bank will usually contact the depositor to ask if they want to continue with the new lower profit rate or withdraw their deposit and the profit they have accrued to date at the original rate.

Islamic banking accounts are open to anyone, and the ethical guidelines followed will appeal to many non-Muslims as well.

1.1 Advantages and Disadvantages

There are a number of advantages to investing in cash:

- One of the key reasons for holding money in the form of cash deposits is **liquidity**. Liquidity is the ease and speed with which an investment can be turned into cash to meet spending needs. Most investors are likely to have a need for cash at short notice and so should plan to hold some cash on deposit to meet possible needs and emergencies before considering other less liquid investments.
- The other main reasons for holding cash investments are as a savings vehicle and for the interest return that can be earned on them.
- A further advantage is the relative safety that cash investments have and that they are not exposed to market volatility, as is the case with other types of assets.

Investing in cash does have some serious drawbacks, however, including:

- Banks and savings institutions are of varying creditworthiness and the risk that they may default needs to be assessed and taken into account.
- Inflation reduces the real return that is being earned on cash deposits and often the after-tax return can be negative.
- Interest rates vary, and so the returns from cash-based deposits will also vary.
- During periods of low global interest rates, charges on money market accounts or funds can result in negative or flat returns.

Although banks and savings institutions are licensed, monitored and regulated, it is still possible that such institutions might fail, as was seen in the aftermath of the 2008 financial crisis. Deposits are, therefore, usually protected by a government-sponsored compensation scheme. This will repay any deposited money lost, typically up to a set maximum, due to the collapse of a bank or savings institution. The sum is generally fixed so as to be of meaningful protection to most retail investors, although it would be of less help to very substantial depositors.

When cash is deposited overseas, depositors should also consider the following:

- The costs of currency conversion and the potential exchange rate risks if the deposit is not made in the investor's home currency.
- The creditworthiness of the banking system and the chosen deposit-taking institution, and whether a depositors' protection scheme exists and if non-residents are protected under it. Not every country operates one, and so the onus is on the investor or their adviser to check.
- The tax treatment of interest applied to the deposit.
- Whether the deposit will be subject to any exchange controls that may restrict access to the money and its ultimate repatriation.

1.2 Cryptocurrencies ('Crypto')

In this section, we look at **cryptocurrencies** (crypto) and how they differ from fiat money.

Within what we can term digital markets, cryptocurrencies are a digital currency or property that can be traded, stored and transferred electronically. There is no single definition of cryptocurrencies, but one from the European regulatory authorities is that they are a virtual currency that is represented by a digital record and is not issued by a central bank or similar institution. The best-known and largest is Bitcoin. Bitcoin uses **blockchain** technology to build a decentralised network that has no central trusted authority and is open to anyone to participate.

The rapid expansion of Bitcoin has challenged preconceptions as to the expected size and impact of the cryptocurrency market. From launching in 2009, and from Bitcoin being valued only $1 in 2011, Bitcoin reached an all-time high of $103,679 on 5 December 2024, before falling back as investors invested in spot Bitcoin ETFs. Bitcoin ETFs saw net inflows of $676 million on 3 December[1], highlighting renewed investor interest in the cryptocurrency market. In doing so, Bitcoin's total capitalisation passed $2 trillion, and it has established itself as an alternative to traditional fiat currencies as a means of exchange, a **quasi-asset** rivaling traditional asset classes like equities, and a store of value comparable to some commodities like gold. It is noteworthy that at $2 trillion, Bitcoin's value exceeds the total volume of

1 Bitcoin ETF Flow (US$m) – Farside Investors (https://farside.co.uk/btc/)

government bonds from Spain or Brazil and is closing on the market capitalisation of the entire UK stock market. Beyond its own success, Bitcoin has helped create an epicentre for a growing cryptocurrency ecosystem.

By comparison, fiat currency is regarded as the current form of traditional money. Throughout history, many different things have been used as money, such as gold and silver. In the 16th century, goldsmiths began storing gold coins for customers and issuing them with receipts, which could be converted back into gold on demand. Over time, people started to use these receipts for making payments instead of returning to the goldsmith to withdraw their gold when they needed to transact. As a result, these receipts became a form of money and forerunners of the banknotes used today. Banknotes, until 1931, could have been exchanged on demand for the equivalent amount of gold that they represented. Since then, banknotes became a form of 'fiat money' – money that is no longer convertible into gold or any other asset. So, fiat money does not have intrinsic value but is accepted because the parties engaging in exchange agree on its value and because governments have established it as legal tender.

Meanwhile, cryptocurrency is not a legally established currency backed by a central bank, but this aspect is currently undergoing rapid change. In September 2021, Bitcoin became legal tender in El Salvador. In February 2022, Ukraine passed a law to legalise Bitcoin and other cryptocurrencies. As of March 2024, Bitcoin was legal in the US, Japan, the UK, and most other developed countries. But in emerging markets and other areas, their legal status has varied dramatically. The situation is moving rapidly. Here is a brief summary of the regulatory activity in each region at the time of writing:

- In the **US**, Bitcoin is subject to regulation. Following the bankruptcies of FTX, BlockFi, Voyager Digital and other cryptocurrency platforms, the US Securities and Exchange Commission (SEC) ratcheted up its enforcement of anti-fraud and securities regulations in the crypto market. Stablecoins and other tokens are also under greater SEC scrutiny. In total, the SEC commenced 26 cryptocurrency enforcement actions in 2023. The US Internal Revenue Service (IRS) considers bitcoin and other cryptocurrencies to be 'property', issuing appropriate tax treatment guidance for taxpayers.
- The **European Union (EU)** has passed the Markets in Crypto Assets Regulation (MiCA) bill, aimed at regulating the digital asset market. MiCA covers several key areas including transparency, disclosure, authorisation and supervision of transactions. The regulation is meant to reduce risks for consumers buying crypto-assets. EU cryptocurrency regulation then varies depending on individual member states, but crypto is broadly considered legal across the EU.
- In **Australia**, a survey by the Australian Securities and Investments Commission (ASIC) found that, after Australian shares, cryptocurrency was the second most common type of asset held in Australia. Concerns have been rising that investors do not comprehend the hazards associated with cryptocurrencies. However, cryptocurrency exchanges and firms promoting investing in digital assets will need to be licensed by the ASIC under new rules being considered. The ASIC has proposed a prosecution 'safe harbour' for start-ups that apply for the financial licenses following high-profile breaches, frauds, and collapses.
- Meanwhile in **Asia**, China had restricted bitcoin without criminalising the holding of it in 2019 but more recently has licensed certain exchanges to offer bitcoin and ether trading. India has so far banned banks from dealing in bitcoin and left the legal status of cryptocurrencies undetermined and under review. In Japan, the Payment Services Act defines 'crypto-assets' as payment methods not denominated in fiat currency used to pay unspecified persons. There are no restrictions on owning and investing in cryptocurrencies. Japan has the world's most progressive regulatory climate for cryptocurrencies and recognises Bitcoin and other digital currencies as legal property under the Payment Services Act. Crypto exchanges in Japan are then registered.

According to regulators, there are three main kinds of crypto-assets:

- **Payment tokens** such as Bitcoin and other cryptocurrencies.
- **Security/asset/investment tokens** which have features similar to general investments such as asset ownership rights, entitlement to a share of future profits, repayment of a specific sum of money, or tradability.
- **Utility tokens** that give access to services and products.

Economic theory holds that money serves three functions:

- A store of value.
- A medium of exchange with which to make payments.
- A unit of account with which to measure the value of any particular item that is for sale.

Meeting these economic definitions does not necessarily imply that an asset will be regarded as money for legal or regulatory purposes. For example, one of the reasons that prevent cryptocurrencies from popular usage is that they are too volatile to be a good store of value, with the possible exception of a subcategory of cryptocurrency called 'stablecoins', which are typically pegged at a 1:1 ratio to a legal currency. Nor are cryptocurrencies widely accepted as means of exchange, and they are not used as a unit of account; instead, they are more commonly regarded as a speculative investment.

The major differences between cryptocurrencies and fiat currencies are summarised in the table below:

Difference	Fiat currency	Cryptocurrency
Form held	Physical forms of money, such as coins and banknotes, exist alongside digital representations in electronic banking systems.	Primarily digital, cryptocurrencies do not have a physical form. Transactions are recorded on a blockchain, and ownership is established through cryptographic keys.
Centralisation	Issued and regulated by a central authority, usually a government or central bank. The central authority has the power to control the money supply, implement monetary policies and regulate financial institutions.	Operated on decentralised networks based on blockchain technology. There is no central authority governing or controlling cryptocurrencies like Bitcoin. Instead, they rely on a distributed ledger maintained by a network of nodes.
Issuance and supply	Central authorities, like central banks, have the authority to issue and regulate the supply of fiat currencies. They can print more money or withdraw money from circulation as needed.	The supply of most cryptocurrencies is typically capped, creating a maximum limit on the total number of coins that can ever be in circulation. For example, the total supply of Bitcoin is capped at 21 million coins.

Difference	Fiat currency	Cryptocurrency
Regulatory oversight	Traditional financial systems are subject to extensive regulatory oversight. Governments and central banks enact and enforce laws related to banking, monetary policy, and financial transactions. Regulatory bodies such as the FCA ensure compliance with anti-money laundering (AML) and know your customer (KYC) regulations.	Regulations for cryptocurrencies vary widely across jurisdictions. Regulatory measures often focus on consumer protection, preventing illegal activities and ensuring tax compliance. For example, the UK has been working to align its crypto regulations with AML directives. Crypto exchanges and wallet providers are typically subject to AML regulations to prevent illicit financial activities and must be officially registered with the FCA.
Anonymity and transparency	Transactions with fiat currencies are generally traceable, as banks and financial institutions are subject to regulatory oversight and record-keeping requirements.	Transactions on a blockchain are transparent and traceable, but the level of anonymity can vary depending on the cryptocurrency. Some cryptocurrencies offer more privacy features than others.
Intrinsic value	Fiat money does not have intrinsic value per se; its value is derived from the trust people have in the issuing authority (central bank) and the belief that it can be exchanged reliably for goods and services.	Value is often derived from factors like scarcity, utility within a blockchain ecosystem, and market demand. Cryptocurrencies are not backed by physical commodities like gold, but gain value from network consensus and adoption rate (volume traded).
Transaction speed and currency accessibility	Transactions involving fiat currencies can sometimes take longer, especially in cross-border transactions, and accessibility may be limited in certain regions.	Transactions are often faster, and cryptocurrencies can be accessed by anyone with an internet connection.
Volatility and Price Behaviour	While exchange rates can fluctuate, fiat currencies are generally considered significantly more stable than cryptocurrencies owing to the high volume of multiple currency forex trading, creating cross-currency reference and rate parities.	Cryptocurrency prices can be highly volatile, with values sometimes experiencing significant fluctuations over short and longer periods. The levels of volatility observed (including large dislocations and periods of rapid and prolonged appreciation) do not conform to typical currency movements and behave more closely to commodities.

2. Money Markets

Learning Objective

5.2.1 Know the difference between a capital market instrument and a money market instrument

5.2.2 Know the definition and features of the following: Treasury bill; commercial paper; certificate of deposit; money market funds

5.2.3 Know the advantages and disadvantages of investing in money market instruments

The money markets are the wholesale or institutional markets for cash and are characterised by the issue, trading and **redemption** of short-dated negotiable securities. These can have a **maturity** of up to one year, though three months or less is more typical.

By contrast, the capital markets are the long-term providers of finance for companies, either through investment in bonds or shares.

Owing to the short-term nature of the money markets, most instruments are issued at a discount to their face value to save on the administration associated with registration and the payment of interest. Although accessible to retail investors indirectly through collective investment (mutual) funds, direct investment in money market instruments is often subject to a relatively high minimum subscription and therefore tends to be more suitable for institutional investors.

The following are examples of the main types of money market instruments.

Treasury Bills	• **Treasury bills** – these are usually issued weekly by, or on behalf of, governments, and the money is used to meet the government's short-term borrowing needs. Treasury bills are non-interest-bearing instruments and so are sometimes referred to as 'zero coupon' instruments. Zero coupon bonds are discussed further in chapter 4. Instead of interest being paid out on them, they are issued at a discount to par – ie, a price of less than US$100 per US$100 nominal – and commonly redeemed after three months. For example, a Treasury bill might be issued for US$998 and mature at US$1,000 three months later. The investor's return is the difference between the US$998 they paid, and the US$1,000 they receive on the Treasury bill's maturity.

Certificates of Deposit	• **Certificates of deposit (CDs)** – these are issued by banks in return for deposited money: think of them as tradeable deposit accounts, as they can be bought and sold in the same way as shares. For example, ABC Bank might issue a CD to represent a deposit of US$1 million from a customer, redeemable in six months. The CD might specify that ABC Bank will pay the US$1 million back, plus interest of, say, 2.5% of US$1 million. If the customer needs the money back before six months has elapsed, they can sell the CD to another investor in the money market. Until the late 1960s, a rigidity in the interbank market meant that deposits, once taken, could not be traded during their life. To overcome this, CDs were introduced which could be traded on a secondary market. By market convention, it is a short-term marketable instrument with a maturity of up to five years, although the vast majority are issued for periods of less than six months. Interest can be at a fixed or variable rate, although they may also be issued at a discount and without a coupon.
Commercial Paper	• **Commercial paper (CP)** – this is the corporate equivalent of a Treasury bill. CP is issued by large companies to meet their short-term borrowing needs. A company's ability to issue commercial paper is typically agreed with banks in advance. For example, a company might agree with its bank to a programme of US$10 million worth of CP. This would enable the company to issue various forms of CP with different maturities (eg, one month, three months and six months), and possibly different currencies. As with Treasury bills, CP is zero coupon and issued at a discount to its par value.

These money market instruments are all bearer instruments for which the issuer does not maintain a register of ownership. Ownership is simply evidenced by holding the instruments, although, in practice, these are immobilised centrally in vaults by central securities depositories (CSDs) or similar agencies.

Settlement of stock market trades in money market instruments is typically achieved through the same settlement system that is used for equities and bonds, and is commonly settled on the day of the trade or the following business day.

As mentioned earlier, the money market is a highly professional market that is used by banks and companies to manage their liquidity needs. It is not readily accessible by private investors, who instead need to utilise either money market accounts offered by banks, or money market funds.

A money market account is perhaps better described as a money market deposit account. It is essentially a savings account that typically requires a substantial minimum balance and notice period. As it is a form of bank account, the depositor generally has the safety net of some form of depositor protection scheme.

In contrast, a money market fund is actually a money market mutual fund, a collective investment scheme (CIS) which pools investors' money to invest in short-term debt instruments, such as Treasury bills and CP. There is a range of money market funds available, and they can offer two major advantages over money market accounts. An obvious advantage is the pooling of funds with other investors, which gives the investor access to assets they would not otherwise be able to invest in either due to lack of direct access, minimum investment requirements or regulatory constraints. The returns on money market funds tend to also be greater than a simple money market account offered by a bank, mainly because the investor is taking a greater risk since such funds are not covered by the depositor protection scheme.

Advantages and Disadvantages

Cash deposits provide a low-risk way to generate an income or capital return, as appropriate, while preserving the nominal value of the amount invested. They also play a valuable role in times of market uncertainty. However, they are unsuitable for anything other than the short term as, historically, they have underperformed most other asset types over the medium to long term. Moreover, in the long term, the return from cash deposits has often been barely positive after the effects of inflation and taxation are taken into account.

Money market investments can be used instead to fulfil a number of roles within a client's portfolio, including:

- as a short-term home for cash balances, or
- as an alternative to bonds and equities (particularly in uncertain times).

As seen, money market deposit accounts can be used as a temporary home for idle cash balances rather than using a standard retail deposit account. For the retail investor, these accounts can at times offer higher returns than can be achieved on standard deposits and are offered by most retail banks. The disadvantage is that the higher returns can usually only be achieved with relatively large investments.

As an alternative, a money market fund can produce greater returns due to the pooled nature of this collective investment vehicle, which can access better rates than smaller deposits.

A wide range of money market funds are available and can offer some advantages over pure money market accounts. There is the obvious advantage that the pooling of funds with other investors gives the investor access to assets they would not otherwise be able to invest in. The returns on money market funds should also be greater than a simple money market account offered by a bank.

Placing funds in a money market account means that the investor is exposed to the risk of that bank. By contrast, a money market fund will invest in a range of instruments from many providers, and, as long as they are AAA-rated, they can offer high security levels. A rating of AAA is the highest rating assigned by a credit rating agency.

Money markets also offer a potentially safe haven in times of market falls. When markets have had a long bull period and economic prospects begin to worsen, an investor may want to take profits at the peak of the market cycle and invest the funds raised in the money markets until better investment opportunities arise.

The same rationale can be used when the investor does not want to commit new cash at the top of the market cycle. The nature of money market instruments means that they offer an alternative investment that gives limited exposure to any appreciable market risk.

Within a client's normal portfolio of investments, a proportion of the investments will be held as cash. Money market investments can be the vehicle for holding such asset allocations and are in competition with other short-term deposit accounts. It should be noted that money market funds may invest in instruments in which the capital is at risk and so may not be suitable for many investors. In addition, money market funds may invest in assets denominated in other currencies and so introduce exchange rate risk.

Money market funds, therefore, can have a core role to play in an investment portfolio. It does need to be remembered, however, that they still carry some risks, and the level of risk varies between one type of instrument and another. The short-term nature of the money market instruments provides some protection, but short-term interest rates fluctuate frequently, which will result in some price volatility.

3. Foreign Exchange (Forex or FX)

Learning Objective

5.4.1 Know the basic structure of the foreign exchange market including: currency quotes; settlement; spot/forward; short-term currency swaps

5.4.2 Be able to calculate a forward exchange rate using the interest rate parity formula

The foreign exchange (FX) market refers to the trading of one currency for another. It is by far the largest market in the world.

Historically, currencies were backed by gold (as money had 'intrinsic value'). This prevented the value of money from being debased and inflation being triggered. This gold standard was replaced after the Second World War by the Bretton Woods Agreement, which aimed to prevent speculation in currency markets by fixing all currencies against the US dollar and making the dollar convertible to gold at a fixed rate of US$35 per ounce. Under this system, countries were prohibited from devaluing their currencies by more than 10%, which they might have been tempted to do to improve their trade position.

The growth of international trade, and increasing pressure for the movement of capital, eventually destabilised this agreement, and it was finally abandoned in the 1970s. Currencies were allowed to float freely against one another, leading to the development of new financial instruments and speculation in the currency markets.

Trading in currencies became 24-hour, as it could take place in the various time zones of Asia, Europe and America. London, being located between the Asian and American time zones, was well placed to take advantage of this and has grown to become the world's largest forex market. Other large centres include the US, Singapore, Hong Kong and Japan.

Trading of foreign currencies is always done in pairs. These are currency pairs when one currency is bought and the other is sold, and the prices at which these take place make up the exchange rate. When the exchange rate is being quoted, the name of the currency is abbreviated to a three-digit reference; so, for example, sterling is abbreviated to GBP, which you can think of as an abbreviation for Great Britain pounds.

3.1 Currency Quotes

When currencies are quoted, the first currency is the base currency and the second is the counter or quote currency. The base currency is always equal to one unit of that currency, in other words, one pound, one dollar or one euro. For example, the EUR:USD exchange rate may be quoted as 1:1.1250, which means that €1 is worth US$1.125.

However, when currency pairs are quoted, a market maker or FX trader will quote a bid and an ask price. Staying with the EUR:USD example, where the quote is 1:1.1250/60, the euro is not mentioned in practice as standard convention is that the base currency is always one unit. If you want to buy €100,000 then you will need to pay the higher of the two prices and deliver US$112,600; if you want to sell €100,000 then you get the lower of the two prices and receive US$112,500.

The most commonly quoted currency pairs are:

- US dollar and the Japanese yen (USD/JPY)
- Euro and US dollar (EUR/USD)
- US dollar and Swiss franc (USD/CHF)
- British pound and US dollar (GBP/USD), and
- Euro and British pound (EUR/GBP).

When the exchange rate is going up, it means that the value of the base currency is rising relative to the other currency and is referred to as the currency strengthening, and when the opposite is the case, the currency is said to be weakening.

The forex market is an over-the-counter (OTC) market, ie, one where brokers and dealers negotiate directly with one another. The main participants are large international banks which continually provide the market with both bid (buy) and ask (sell) prices. Central banks are also major participants in FX markets, which they use to try to control money supply, inflation, and interest rates.

3.2 FX Transactions

There are several types of transaction undertaken in the FX market, particularly the following:

- **Spot transactions** – the spot rate is the rate quoted by a bank for the exchange of one currency for another with immediate effect. However, it is worth noting that, in many cases, spot trades are settled – that is, the currencies actually change hands and arrive in recipients' bank accounts – two business days after the transaction date (T+2).
- **Forward transactions** – in this type of transaction, money does not actually change hands until some agreed future date. A buyer and seller agree on an exchange rate for any date in the future, for a fixed sum of money, and the transaction occurs on that date, regardless of what the market rates are then. The duration of the trade can be a few days, months or years.

- **Futures** – foreign currency futures are standardised versions of forward transactions that are traded on derivatives exchanges in standard sizes and maturity dates. The average contract length is roughly three months.
- **Swaps** – a common type of forward transaction is the currency swap. In a currency swap, two parties exchange currencies for a certain length of time and agree to reverse the transaction at a later date. These are not exchange-traded contracts and, instead, are negotiated individually between the parties to a swap. They are a type of OTC derivative (see chapter 6).

Settlement is often made through CLS Bank or the worldwide international banking system. CLS Bank is a specialist bank, created in 2002, that is owned by many of the world's largest financial institutions and is used to settle FX transactions between member banks using a system called 'payment-versus-payment'. Member banks input their instructions for the buy and sell side of an FX transaction and, provided the instructions match and the necessary funds are held, the currencies are exchanged. FX trades can also be settled directly by participants as banks hold accounts with each other (and their overseas branches and subsidiaries) allowing direct settlement.

3.3 Forward Exchange Rates

A forward exchange contract is an agreement between two parties to either buy or sell foreign currency at a fixed exchange rate for settlement at a future date. The **forward exchange rate** is the exchange rate set today, even though the transaction will not settle until some agreed point in the future, such as in three months' time.

The relationship between the spot exchange rate and forward exchange rate for two currencies is given by the differential between their respective nominal interest rates over the term being considered (the nominal rate is simply the quoted interest rate). The relationship is purely mathematical and has nothing to do with market expectations as these are reflected in the spot rate.

Example

To calculate a three-month forward rate for GBP/USD, we need the current spot rate and the three-month interest rates in the UK and the US:

- The GBP/USD spot rate is 1.25.
- Three-month rates in the UK are 0.50% and in the US are 1%. As those interest rates are quoted on an annual basis, we need to adjust them to quarterly. For simplicity, we will assume that the three-month rate is one-quarter of that (in practice, this would be calculated using the number of days in the period).
- UK three-month rates are 0.50% ÷ 4 = 0.125%.
- US three-month rates are 1.00% ÷ 4 = 0.25%.
- We then convert both rates into decimals so they can be used in the calculation – ie, 0.0025 and 0.00125.

We can then calculate the forward rate using the interest rate parity formula:

$$\text{Forward rate} = \text{spot rate} \times \left(\frac{1 + \text{quote currency short-term rate}}{1 + \text{base currency short-term rate}} \right)$$

Applying the formula, we can calculate the three-month forward rate as:

$$\text{Forward rate} = 1.25 \times \left(\frac{1 + 0.0025}{1 + 0.00125} \right) = 1.2516$$

As US interest rates in this example are higher than in the UK, the forward rate is higher. If it had been lower, the forward rate would have been lower.

The logic behind the theory of interest rate parity, in simple terms, is that the forward exchange rate should make investors indifferent to interest rates available on bank deposits in the countries involved. This can be seen by expanding on the example above:

- If an investor were to buy $125,000, they would need to deliver £100,000.
- The forward rate at the end of three months should result in a position in which they are indifferent to the interest rate differential.
- So, if the investor retained £100,000 and invested it for three months at 0.125%, they would have £100,125 at the end of the period. If they have $125,000 and invest it for three months at 0.25%, then they would have $125,312.50 at the end of the period.

	Today	Interest rate	Interest for the period	Value at the end
GBP	£100,000.00	0.125%	£125.00	£100,125.00
USD	$125,000.00	0.25%	$312.50	$125,312.50

- The forward rate, therefore, needs to make $125,312.50 equate to £100,125, so 125,312.50/100,125 = 1.2516.

4. Property

Learning Objective

5.3.1 Know the characteristics of property investment: commercial/residential property; direct/indirect investment

5.3.2 Know the potential advantages and disadvantages of investing in property

Property as an asset class is unique in its distinguishing features:

- Each individual property is unique in terms of location, structure and design.
- Valuation is subjective, as property is not traded in a centralised marketplace, and continuous and reliable price data is not available.
- Property is subject to complex legal considerations and high transaction costs upon transfer.
- It is relatively illiquid as a result of not being instantly tradeable.
- It is also illiquid in another sense: the investor generally has to sell all of the property or nothing at all. It is not generally feasible for a commercial property investor to sell, for example, one factory unit out of an entire block (or at least, to do so would be commercially unattractive) – and a residential property owner cannot sell their spare bedroom to raise a little cash.
- Since property can only be purchased in discrete and sizeable units, diversification is made difficult.
- The supply of land is finite, and its availability can be further restricted by legislation and local planning regulations. Therefore, price is predominantly determined by changes in demand.

Only the largest investors, generally institutional investors or very wealthy investors, can purchase sufficient properties to build a diversified portfolio. They tend to avoid residential property (although some have diversified into sizeable residential property portfolios) and instead they concentrate on commercial property, such as shops and offices, industrial property and farmland.

Some key differences between commercial and residential property are shown in the table below.

	Residential Property	Commercial Property
Direct investment	Range of investment opportunities, including second homes, holiday homes and buy-to-let	Size of investment required means direct investment in commercial property is limited to property companies and institutional investors
Tenancies	Typically, short renewable leases	Long-term contracts with periods commonly in excess of ten years
Repairs	Landlord is responsible	Tenant is usually responsible
Returns	Largely linked to increase in house prices	Significant component is income return from rental income

As an asset class, property has at times provided positive, real, long-term returns allied to low volatility and a reliable stream of income. An exposure to property can provide diversification benefits owing to its low correlation with both traditional and alternative asset classes.

Many private investors have chosen to become involved in the property market through the buy-to-let market or simply by buying a second home. Other investors wanting to include property within a diversified portfolio generally seek indirect exposure via a mutual fund, property bonds issued by insurance companies, or shares in publicly quoted property companies. It needs to be remembered, however, that investing via a mutual fund does not always mean that an investment can be readily realised. During 2008, property prices fell across the board and, as investors started to encash holdings, property funds brought in measures to stem outflows and, in some cases, imposed 12-month gating on encashments. A repeat of this has been seen in recent years, with funds imposing moratoriums due to a large stream of redemptions by investors.

However, property can be subject to prolonged downturns, and its lack of liquidity, significant maintenance costs, high transaction costs on transfer and the risk of having commercial property with no tenant (and, therefore, no rental income) really makes only commercial property suitable as an investment for long-term investing institutions, such as pension funds. The availability of indirect investment media, however, makes property a more accessible asset class to those running smaller diversified portfolios.

End of Chapter Questions

Think of an answer for each question and refer to the appropriate section for confirmation.

1. **How would you expect the interest payable on an instant access account to compare to a fixed-term account?**
   Answer Reference: Section 1

2. **Why should the risk of default by a bank be taken into account when considering a deposit?**
   Answer Reference: Section 1

3. **What are the advantages and disadvantages of investing in cash?**
   Answer Reference: Section 1.1

4. **What are the major differences between cryptocurrencies and fiat currencies?**
   Answer Reference: Section 1.2

5. **According to economic theory, what are the three functions that money should serve?**
   Answer Reference: Section 1.2

6. **What are the key global regulations relating to cryptocurrency?**
   Answer Reference: Section 1.2

7. **How is the return on a Treasury bill paid?**
   Answer Reference: Section 2

8. **What is the settlement period for a spot forex trade?**
   Answer Reference: Section 3

9. **A company has entered into a foreign exchange transaction to exchange US dollars for their own currency in one month's time. What type of forex transaction is this?**
   Answer Reference: Section 3

10. **What are the advantages and disadvantages of investing in property?**
    Answer Reference: Section 4

Chapter Six

Derivatives

1. **Overview of Derivatives** 127
2. **Futures** 129
3. **Options** 131
4. **Interest Rate Swaps** 133
5. **Credit Default Swaps (CDSs)** 134
6. **Derivatives Exchanges** 135
7. **Investing in Derivatives Markets** 138

This syllabus area will provide approximately 4 of the 50 examination questions

1. Overview of Derivatives

Just as the industry contends with the advent of digital markets like cryptocurrencies, derivatives remind us that innovation never stops. Derivatives have actually been around for hundreds of years. Their origins can be traced back to agricultural markets, where farmers needed a mechanism to guard against price fluctuations caused by gluts of produce, and merchants wanted to guard against shortages that might arise from periods of drought.

So, in order to fix the price of agricultural produce in advance of harvest time, farmers and merchants would enter into forward contracts. These set the price at which a stated amount of a **commodity** would be delivered between a farmer and a merchant (termed the 'counterparties' to the trade) at a pre-specified future date.

These early derivative contracts introduced an element of certainty into commerce and gained immense popularity. This led to the opening of the world's first derivatives exchange in 1848, the Chicago Board of Trade (CBOT).

Modern commodity markets have their roots in this trading of agricultural products. Commodity markets are where raw or primary products are exchanged or traded on regulated exchanges. They are bought and sold in standardised contracts – a standardised contract is one when not only the amount and timing of the contract conforms to the exchange's norm, but also the quality and form of the underlying asset – for example, the dryness of wheat or the purity of metals.

Commodities are sold by producers (eg, farmers, mining companies and oil companies) and purchased by consumers (eg, food manufacturers and industrial goods manufacturers). Much of the buying and selling is undertaken via commodity derivatives which also offer the ability for

producers and consumers to hedge their exposure to price movements. However, there is also substantial trading in commodities (and their derivatives) undertaken by financial firms and speculators seeking to make profits by correctly predicting market movements.

Today, derivatives trading also takes place in financial instruments, indices, metals, energy and a wide range of other assets.

The majority of derivatives take one of four forms: forwards, futures, options or swaps.

1.1 Uses of Derivatives

Learning Objective

6.1.1 Know the uses and application of derivatives

A derivative is a financial instrument whose price is based on the price of another asset, known as the 'underlying'. The underlying could be a financial asset, a commodity, a currency, an index or indeed a range of other reference assets such as weather. Examples of financial assets include bonds and shares, and commodities include oil, gold, silver, corn and wheat.

Derivatives are often thought of as dangerous instruments that are impenetrably complex. While derivatives can be complex and present systemic risks, they are chiefly designed to be used to reduce the risk faced by organisations and individuals, a process known as 'hedging'. Equally, many derivatives are not particularly complex.

As we will see later in this chapter, the trading of derivatives can take place either directly between counterparties or on an organised exchange. When trading takes place directly between counterparties it is referred to as over-the-counter (OTC) trading, and when it takes place on an exchange, such as the Chicago Mercantile Exchange (CME), the derivatives are referred to as being exchange-traded.

Derivatives play a major role in the investment management of many large portfolios and funds, and are used for hedging, anticipating future cash flows, asset allocation change, arbitrage and speculation. Each of these uses is expanded on briefly below:

- **Hedging –** this is a technique employed by portfolio managers to reduce portfolio risk, such as the impact of adverse price movements on a portfolio's value. This could be achieved by buying or selling futures contracts, buying **put options** or selling **call options**.
- **Anticipating future cash flows –** closely linked to the idea of hedging, if a portfolio manager expects to receive a large inflow of cash to be invested in a particular asset, then futures can be used to fix the price at which it will be bought and offset the risk that prices will have risen by the time the cash flow is received.
- **Asset allocation changes –** changes to the asset allocation of a fund, whether to take advantage of anticipated short-term directional market movements or to implement a change in strategy, can be made more swiftly and less expensively using derivatives such as futures than by actually buying and selling securities within the underlying portfolio.

- **Arbitrage –** the process of deriving a risk-free profit from simultaneously buying and selling the same asset in two different markets, when a price difference between the two exists. If the price of a derivative and its underlying asset are mismatched, then the portfolio manager may be able to profit from this pricing anomaly.
- **Speculation –** involves assuming additional risk (betting) in an effort to make, or increase, profits in the portfolio.

2. Futures

Learning Objective

6.2.1 Know the definition and function of a future

6.4.1 Understand the following terms: long; short; open; close

2.1 Development of Futures

As mentioned above, the CBOT opened the world's first derivatives exchange in 1848. The exchange soon after developed a futures contract that enabled standardised qualities and quantities of grain to be traded for a fixed future price on a stated delivery date. Unlike the forward contract that preceded it, the futures contract could itself be traded. These futures contracts have subsequently been extended to a wide variety of commodities and many other assets and are offered by an ever-increasing number of derivatives exchanges.

It was not until 1975 that CBOT introduced the world's first financial futures contract. This set the scene for the exponential growth in product innovation and the volume of futures trading that followed.

2.2 Definition and Function of a Future

Derivatives provide a mechanism by which the price of assets or commodities can be traded in the future at a price agreed today, without the full value of this transaction being exchanged or settled at the outset.

A future is a legally binding agreement between a buyer and a seller. The buyer agrees to pay a pre-specified amount for the delivery of a particular pre-specified quantity of an asset at a pre-specified future date. The seller agrees to deliver the asset at the future date, in exchange for the pre-specified amount of money.

Example

A buyer might agree with a seller to pay US$50 per barrel for 1,000 barrels of crude oil in three months' time. The buyer might be an electricity-generating company wanting to fix the price it will have to pay for the oil to use in its oil-fired power stations, and the seller might be an oil company wanting to fix the sales price of some of its future oil production.

A futures contract has two distinct features:

- **It is exchange-traded** – for example, on derivatives exchanges, such as ICE Europe in London or the Chicago Mercantile Exchange (CME) in the US.
- **It is dealt on standardised terms** – the exchange specifies the quality of the underlying asset, the quantity underlying each contract, the future date and the delivery location. Only the price is open to negotiation. In the above example, the oil quality will be based on the oil field from which it originates (eg, Brent crude – from the Brent oil field in the North Sea), the quantity is 1,000 barrels, the date is three months ahead and the location might be the port of Rotterdam in the Netherlands.

2.3 Futures Terminology

Derivatives markets have specialised terminology that is important to understand.

Staying with the example above, the electricity company is the buyer of the contract, agreeing to purchase 1,000 barrels of crude oil at US$70 per barrel for delivery in three months. The buyer is said to go long of the contract, while the seller (the oil company in the above example) is described as going short. Entering into the transaction is known as **opening** the trade and the eventual delivery of the crude oil will close out the trade.

The definitions of these key terms that the futures market uses are as follows:

- **Long** – the term used for the position taken by the buyer of the future. The person who is 'long' in the contract is committed to buying the underlying asset at the pre-agreed price on the specified future date.
- **Short** – the position taken by the seller of the future. The seller is committed to delivering the underlying asset in exchange for the pre-agreed price on the specified future date.
- **Open** – the initial trade. A market participant opens a trade when it first enters into a future. It could be buying a future (opening a long position) or selling a future (opening a short position).
- **Close** – the physical assets underlying most futures that are opened do not end up being delivered: they are closed-out instead. For example, an opening buyer will almost invariably avoid delivery by making a closing sale before the delivery date. If the buyer does not close out, they will pay the agreed sum and receive the underlying asset. This might be something the buyer is keen to avoid, for example because the buyer is actually a financial institution simply speculating on the price of the underlying asset using futures.
- **Covered** – when the seller of the future has the underlying asset that will be needed if physical delivery takes place.
- **Naked** – when the seller of the future does not have the asset that will be needed if physical delivery of the underlying commodity is required. The risk could be unlimited.

3. Options

Learning Objective

6.3.1 Know the definition and function of an option

6.3.2 Understand the following terms: calls; puts

6.4.1 Understand the following terms: holder; writing; premium; covered; naked

3.1 Development of Options

Options did not really start to flourish until two US academics (Fisher Black and Myron Scholes) produced an option pricing model in 1973 that allowed them to be readily priced. This paved the way for the creation of standardised options contracts and the opening of the Chicago Board Options Exchange (CBOE) in the same year. This, in turn, led to an explosion in product innovation and the creation of other options exchanges, such as the London International Financial Futures and Options Exchange or LIFFE (now part of the **Intercontinental Exchange (ICE)**).

3.2 Definition of an Option

An option gives a buyer the right, but not the obligation, to buy or sell a specified quantity of an underlying asset at a pre-agreed **exercise price**, on or before a pre-specified future date or between two specified dates. The seller, in exchange for the payment of a **premium**, grants the option to the buyer.

A key difference between a future and an option is, therefore, that the option gives the right to buy or sell, whereas a future is a legally binding obligation between the counterparties.

When options are traded on an exchange, they will be in standardised sizes and terms. On occasion, however, investors may wish to trade an option that is outside these standardised terms, and they will do so in the OTC market. Options can, therefore, also be traded off-exchange, or OTC, where the contract specification determined by the parties is bespoke.

3.3 Options Terminology

There are two main classes of options:

- A **call option** is when the buyer of the option has the right to buy the asset at the exercise price if they choose to. The seller is obliged to deliver if the buyer exercises the option.
- A **put option** is when the buyer of the option has the right to sell the underlying asset at the exercise price. The seller of the put option is obliged to take delivery and pay the exercise price if the buyer exercises the option.

The buyers of options are the owners of those options. They are also referred to as holders.

The sellers of options are referred to as the **writers** of those options. Their sale is also referred to as taking for the call or taking for the put, depending on whether they receive a premium for selling a call option or a put option.

For exchange-traded contracts, both buyers and sellers settle the contract with a clearing house that is part of the exchange, rather than with each other. The exchange needs to be able to settle bargains if holders choose to exercise their rights to buy or sell. Since the exchange does not want to be a buyer or seller of the underlying asset, it matches these transactions with deals placed by option writers who have agreed to deliver or receive the matching underlying asset, if called upon to do so.

The premium is the money paid by the buyer to the writer at the beginning of the options contract; it is not refundable.

	Call Option	Put Option
Holder	The holder has the right, but not the obligation, to exercise the option to buy.	The holder has the right, but not the obligation, to exercise the option to sell.
Writer	The writer receives a premium from the holder and is obliged to sell if called upon to do so.	The writer received a premium from the holder and is obliged to buy if called upon to do so.

The following simplified example of an options contract is intended to assist understanding of the way in which option contracts might be used.

Example

Suppose shares in Jersey plc are trading at US$3.24 and an investor buys a US$3.50 call for three months. The investor, Frank, has the right to buy Jersey shares from the writer of the option (another investor – Steve) at US$3.50 if he chooses, at any stage over the next three months.

If Jersey shares are below US$3.50 three months later (upon expiry), Frank will abandon the option and it will expire worthless, and Steve will keep the premium Frank paid him.

If they rise to, say, US$6.00 Frank will contact Steve and either:

- exercise the option (buy the shares at US$3.50 each and keep them, or sell them at US$6.00 per share), or
- persuade Steve to give him US$6.00 – US$3.50 = US$2.50 per share to settle the transaction.

If Frank paid a premium of 42 cents to Steve, what is Frank's maximum loss and what level does Jersey plc have to reach for Frank to make a profit?

The most Frank can lose is 42 cents, the premium he has paid. If the Jersey plc shares rise above US$3.50 + 42 cents, or US$3.92, then Frank makes a profit. If the shares rise to US$3.51 then Frank will exercise his right to buy – it is better to make a cent and cut his losses to 41 cents than lose the whole 42 cents.

The most Steve can gain is the premium, ie, 42 cents. Steve's potential loss, however, is theoretically unlimited, unless he actually holds the underlying shares.

Staying with that example, we can look at the terms 'covered' and 'naked'. The writer of the option is hoping that the investor will not exercise their right to buy the underlying shares and then they can simply pocket the premium. This obviously presents a risk because if the price does rise then the writer will need to find the shares to meet their obligation. They may not have the shares to deliver and may have to buy these in the market, in which case their position is referred to as being naked (ie, they do not have the underlying asset – the shares). Alternatively, they may hold the shares, and their position would be referred to as covered.

4. Interest Rate Swaps

Learning Objective

6.6.1 Know the definition and function of interest rate swaps

A swap is an agreement to exchange one set of cash flows for another. Swaps are a form of OTC derivative and are negotiated between the parties to meet their different needs, so each tends to be unique.

Interest rate swaps are the most common form of swaps. They involve an exchange of interest payments and are usually constructed whereby one leg of the swap is a payment of a fixed rate of interest and the other leg is a payment of a floating rate of interest.

They are usually used to hedge exposure to interest rate changes and can be easily appreciated by looking at an example. The rates are applied to a **notional principal** based on the amount to be hedged and, as such, there is no exchange of cash flows at inception.

Example

Company A is embarking on a three-year project to build and equip a new manufacturing plant and borrows funds to finance the cost. Because of its size and credit status, it has no choice but to borrow at variable rates. It can reasonably estimate what additional returns its new plant will generate but, because the interest it is paying will be variable, it is exposed to the risk that the project may turn out to be uneconomic if interest rates rise unexpectedly.

If the company could secure fixed-rate finance, it could remove the risk of interest rate variations and more accurately predict the returns it can make from its investment.

To do this, Company A could enter into an interest rate swap with an investment bank. Under the terms of the swap, Company A pays a fixed rate to the investment bank and in exchange receives an amount of interest calculated on a variable rate. With the amount it receives from the investment bank, it then has the funds to settle its variable rate lending, even if rates increase. In this way, it has hedged its concerns about interest rates rising.

The two exchanges of cash flow are known as the **legs** of the swap and the amounts to be exchanged are calculated by reference to a **notional amount**. The notional amount in the above example would be the amount that Company A has borrowed to fund its project.

Typically, one party will pay an amount based on a fixed rate to the other party, who will pay back an amount of interest that is variable and usually based on a benchmark rate such as SOFR (Secured Overnight Funding Rate) published daily, or its equivalent. The variable rate will usually be set as the benchmark rate plus, say, 0.5% and will be reset quarterly. The variable rate is often described as the 'floating' rate.

5. Credit Default Swaps (CDSs)

Learning Objective

6.7.1 Know the definition and function of credit default swaps

In recent years, there has been significant growth in the use of credit derivatives, of which a credit default swap (CDS) is just one example.

Credit derivatives are instruments whose value depends on agreed credit events relating to a third-party company, for example, changes to the credit rating of that company, or an increase in that company's cost of funds in the market, or adverse credit events relating to it. Credit events are typically defined as including a material default, bankruptcy, a significant fall in an asset's value, or debt restructuring for a specified reference asset.

The purpose of credit derivatives is to enable an organisation to protect itself against unwanted credit exposure by passing that exposure on to someone else. Credit derivatives can also be used to increase credit exposure in return for income.

Although a CDS has the word 'swap' in its name, it is not like other types of swaps, which are based on the exchange of cash flows. A CDS is actually more like an option in a CDS, or more simply insurance; the party buying credit protection makes a periodic payment (or pays an up-front fee) to a second party, the seller. In return, the buyer receives an agreed compensation if there is a credit event relating to some third party or parties. If such a credit event occurs, the seller makes a predetermined payment to the buyer, and the CDS then terminates.

6. Derivatives Exchanges

Learning Objective

6.5.1 Know the characteristics of the derivatives and commodity markets

Derivatives markets serve to allow the easier dealing of contracts, at scale and with frequency, without the disadvantages of physically storing and transporting the underlying assets. As an example, imagine that you wanted to purchase a large amount of wheat from a wholesale supplier. You contact the supplier and see that it will cost the sterling equivalent of $5 a bushel, but you discover that the wheat is currently out of stock in the warehouse. However, you can sign a contract to accept delivery of the wheat in one month's time (when the stock will be replenished) and, at that stage, the store will charge $5 for each bushel you order now. If you sign, you have agreed to defer delivery for one month – and you have purchased into a derivative.

The physical trading of commodities takes place side by side with the trading of derivatives. The physical market concerns itself with procuring, transporting and consuming real commodities by the shipload on a global basis. This trade is dominated by major international trading houses, governments, and the major producers and consumers. The derivatives markets exist in parallel and serve to provide a price-fixing mechanism whereby all stakeholders in the physical markets can hedge market price risk.

Another aspect of commodity markets, more recent in origin but highly developed, is the use of commodities as an investment asset class in its own right.

6.1 Derivatives Markets

As we saw earlier, there are two distinct groups of derivatives, differentiated by how they are traded. These are OTC derivatives and exchange-traded derivatives.

OTC derivatives are ones that are negotiated and traded privately between parties without the use of an exchange. Interest rate swaps are just one of a number of products that are traded in this way.

The OTC market is the larger of the two in terms of value of contracts traded daily. Trading takes place predominantly in Europe and, particularly, in the UK.

Exchange-traded derivatives are ones that have standardised features, such as single stock or index derivatives, and can therefore be traded on an organised exchange. The role of the exchange is to provide a marketplace for trading to take place but, in addition, it also provides some form of guarantee that the trade will eventually be settled. It does this by placing an intermediary (the central counterparty or CCP) between the parties to each trade and by requiring participants to post a margin, which is a proportion of the value of the trade, for all transactions that are entered into.

6.2 Derivatives Exchanges

Examples of leading derivatives exchanges are shown below.

CME	• The main derivatives exchange in the US is the CME Group, which was formed out of the merger in 2006 of the CBOT and the CME. It is the world's largest and most diverse derivatives exchange. • It operates the CME, the CBOT, NYMEX (New York Mercantile Exchange) and COMEX derivatives exchanges.
ICE	• ICE operates a number of exchanges and trading platforms, including futures exchanges in the US, Canada, Europe and Singapore, as well as equity options exchanges.
LME	• The London Metal Exchange (LME) has been operating for over 130 years. Although it is based in London, it is a global market with an international membership and with more than 95% of its business coming from overseas. • The LME trades derivatives on non-precious, non-ferrous metals, such as copper, aluminium and zinc. Trading is predominantly by open outcry on the floor of the exchange.
Eurex	• Eurex is based in Frankfurt, Germany. Its principal products are German bond futures and options, the most well-known of which are contracts on the Bund (the German government bond). It also trades index products for a range of European markets.

6.3 Physical Markets

There are different commodity markets which are differentiated by the commodity that is traded. Some of the main ones are:

- agricultural markets
- base and precious metals markets
- energy markets
- power markets
- plastics markets
- emissions markets, and
- freight and shipping markets.

As an example, we will consider the features of the base and precious metals markets and energy markets below.

Base and Precious Metals	• There are numerous metals produced worldwide and subsequently refined for use in a large variety of products and processes. • As with all other commodity prices, metal prices are influenced by supply and demand. • The factors influencing supply include the availability of raw materials and the costs of extraction and production. • Demand comes from underlying users of the commodity, eg, the demand for metals in rapidly industrialising economies, including China and India. It also originates from investors such as hedge funds which might buy metal futures in anticipation of excess demand or incorporate commodities into specific funds. Producers use the market for hedging their production. Traditionally, the price of precious metals such as gold will rise in times of crisis – gold is often seen as a safe haven.

Energy Markets	• The energy market includes the market for oil (and other oil-based products like petroleum), natural gas and coal.
	• Oil includes both crude oil and various 'fractions' produced as a result of the refining process, such as naphtha, butanes, kerosene, petrol and heating/gas oil. Crude oil is defined by three primary factors:
	  • Field of origin, for example, Brent, West Texas Intermediate or Dubai.
	  • Density, ie, low density or 'light', high density or 'heavy'.
	  • Sulphur content, ie, low sulphur (known as 'sweet') or high sulphur (known as 'sour').
	• Demand for oil and gas is ultimately driven by levels of consumption, which in turn is driven by energy needs, eg, from the manufacturing industry and transport. Supply of these commodities is finite, and countries with surplus oil and gas reserves can export to those countries with insufficient oil and gas to meet their requirements. Oil producing countries that are members of the Organisation of Petroleum Exporting Countries (OPEC) would regularly restrict the supply of oil in order to keep prices high or to drive them up.

7. Investing in Derivatives Markets

Learning Objective

6.5.2 Know the potential advantages and disadvantages of investing in the derivatives and commodity markets

Having looked at various types of derivatives and their main uses, we can summarise some of the main advantages and disadvantages of investing in derivatives.

Advantages

- Enables producers and consumers of goods to agree on the price of a commodity today for future delivery, which can remove the uncertainty of what price will be achieved for the producer and the risk of lack of supply for the consumer.
- Enables investors and portfolio managers to hedge (reduce) the risk associated with a portfolio of investments.
- Enables investment firms to hedge the risk associated with a portfolio or an individual stock.
- Offers the ability to speculate on a wide range of assets and markets to make large bets on price movements using the geared nature of derivatives.

Drawbacks and Risks

- Some types of derivatives investing can involve the investor losing more than their initial outlay and, in some cases, facing potentially unlimited losses.
- Derivatives markets thrive on price volatility, meaning that professional investment skills and experience are required.
- In the OTC markets, there is a risk that a counterparty may default on their obligations, and so it requires great attention to detail in terms of counterparty risk assessment, documentation and the taking of collateral.

End of Chapter Questions

Think of an answer for each question and refer to the appropriate section for confirmation.

1. **What are the main uses of derivatives?**
   Answer Reference: Section 1.1

2. **What are the two key differences between a future and an option?**
   Answer Reference: Sections 2.2 and 3.2

3. **What is the seller of a future known as?**
   Answer Reference: Section 2.3

4. **What is an investor who enters into a contract for the delivery of an asset in three months' time known as?**
   Answer Reference: Section 2.3

5. **Distinguish between a futures position that is covered and one that is naked.**
   Answer Reference: Section 2.3

6. **What name is given to the seller of an option?**
   Answer Reference: Section 3.3

7. **What type of option gives the holder the right to sell an asset?**
   Answer Reference: Section 3.3

8. **What is the price paid for an option known as and who is it paid to?**
   Answer Reference: Section 3.3

9. **What is an interest rate swap?**
   Answer Reference: Section 4

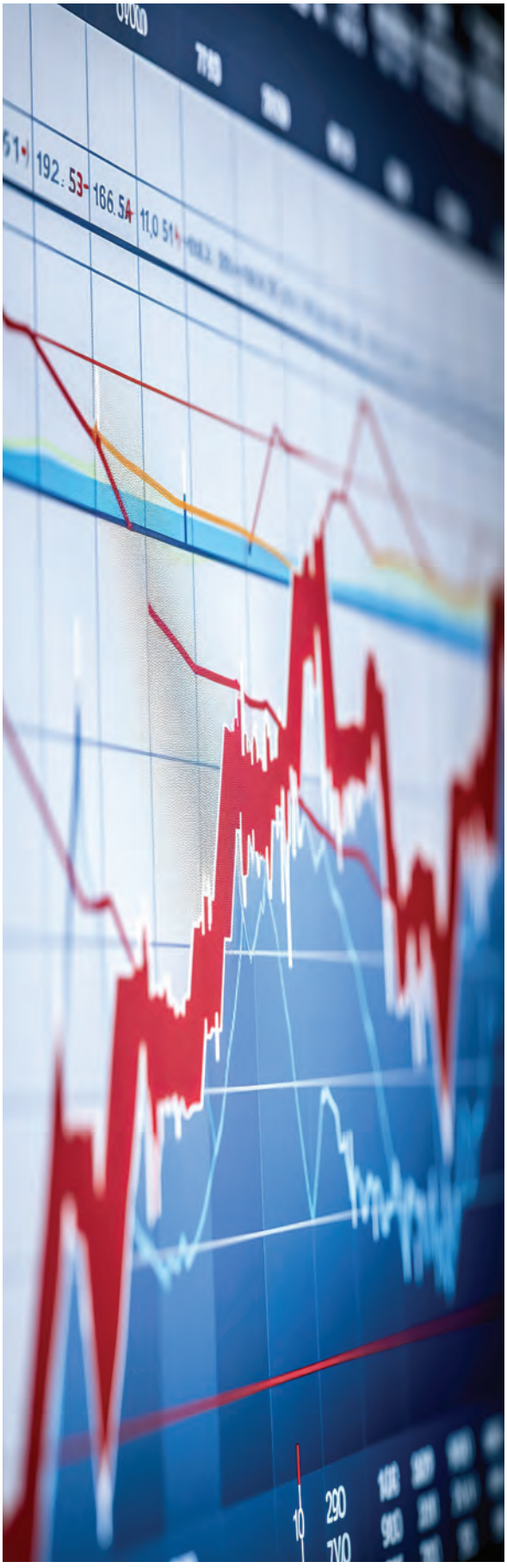
10. **What type of derivative is not exchange-traded, ie, negotiated and traded privately between parties to the transaction?**
    Answer Reference: Sections 4 and 6

Chapter Seven

Investment Funds

1. **Overview of Investment Funds** 143
2. **Open-Ended Funds** 150
3. **Closed-Ended Investment Companies** 154
4. **Exchange-Traded Funds (ETFs)** 157
5. **Alternative Investment Funds (AIFs)** 160

This syllabus area will provide approximately 6 of the 50 examination questions



1. Overview of Investment Funds

When investors decide to invest in a particular asset class, such as equities, there are two ways they can do it: direct investment or indirect investment.

Direct investment is when an individual buys shares in a company, such as buying shares in Apple, the technology giant.

Indirect investment is when an individual buys a stake in an investment fund, such as a mutual fund that invests in the shares of a range of different types of companies, perhaps including Apple.

Achieving an adequate spread of investments through holding direct investments can require a significant amount of money and, as a result, many investors find indirect investment very attractive.

There is a variety of funds available that pool the resources of many investors to provide access to a range of investments. These pooled funds are known as collective investment schemes (CISs), funds, or collective investment vehicles. The term 'collective investment scheme' is an internationally recognised one, but investment funds are also very well-known by other names, such as mutual funds, **unit trusts** or **open-ended investment companies (OEICs)**.

Other terminology that you will encounter is open-ended funds and closed-ended funds. An open-ended fund is one that can create new shares in response to investor demand or cancel them when sold so that their capital can expand or contract – an example is a mutual fund. A closed-ended fund, by contrast, has a fixed capital base so if an investor wants to buy shares, they will do so on the stock exchange and buy them from another investor who wants to sell. They have a fixed capital base as is seen with US closed-ended funds.

An investor is likely to come across a range of different types of investment funds, globally. The main fund markets are as follows:

- The US is the largest fund market in the world at $26.96 trillion in total net assets in 2021. The US accounted for around 40% of the global mutual fund market[1]. US mutual funds cover a wide range of asset classes, such as stocks and bonds, market caps, sectors, industries, and styles. The funds are actively managed to achieve short- and long-term returns. US funds comprise many large companies in various industries, such as automobile, technology, healthcare, and the internet. US fund managers are the largest in the world and include Blackrock and Vanguard, which invest globally. The US is also the largest exchange-traded fund (ETF) market. As of December 2023, the total number of ETFs, domiciled in the US stood at 3,108. Total net assets of these ETFs were $8.1 trillion and accounted for 24% of assets managed by all US investment companies[2].
- Europe boasts the second largest fund market at nearly $34 trillion[3]. Funds that are established in Europe and marketed internationally are often labelled as undertakings for collective investment in transferable securities (UCITS) funds, meaning that they comply with the rules of the EU UCITS directive. In Europe, UCITS funds have the flexibility to be sold in any country in the UCITS area once registered in any one member country. The exception is the UK, where the pan-UCITS 'passport' is now more complex post-Brexit. Unlike the US, debt/bond funds are preferred in the region over equity funds. The UCITS branding is seen as a measure of quality that makes them acceptable for sale in many countries in the Middle East and Asia. The main European centre for establishing funds that are to be marketed internationally is Luxembourg, where investment funds are often structured as an OEIC known as a *Société d'Investissement à Capital Variable* (SICAV).
- The Asia Pacific (APAC) funds market has been one of the fastest growing globally as the region moves from using imported international funds to countries building their own domestic fund markets. However, the slowdown in China-focused funds has had an effect across the APAC region.
- Other popular centres for the establishment of investment funds that are marketed globally include offshore markets such as the Cayman Islands, Bermuda, the Isle of Man and the Channel Islands, as well as the UK and Ireland, where the legal structure is likely to be either an OEIC or a unit trust.

The international nature of the investment funds business can be seen by looking at the funds authorised for sale in Bahrain, which has one of the widest ranges of funds available in the Gulf region with over 1,700 funds registered for sale. Some of these are domiciled in Bahrain, but many are funds from international fund management houses such as BlackRock, Fidelity and JPMorgan. They include SICAVs (see section 2.2.1), **investment companies with variable capital (ICVCs)** – (see section 2.2.3) and unit trusts from a range of internationally recognised firms.

1 US Mutual Funds Industry Market Size, Competitors & Forecast (https://www.researchandmarkets.com/report/united-states-mutual-fund-market#:~:text=With%20a%20whopping%20USD%2026.96%20trillion%20in%20total,than%2040%25%20of%20the%20global%20mutual%20fund%20market.)

2 The US ETF Market: FAQs | Investment Company Institute (https://www.ici.org/faqs/faqs_etfs_market#:~:text=As%20of%20December%202023%2C%20the%20total%20number%20of,assets%20managed%20by%20investment%20companies%20at%20year-end%202023.)

3 https://www.mordorintelligence.com/industry-reports/europe-mutual-fund-industry/market-size

1.1 The Benefits of Collective Investment

Learning Objective

7.1.1 Understand the potential advantages, disadvantages, and risks of collective investment

Investment funds pool the resources of many investors with the aim of pursuing a common investment objective.

This pooling of funds brings several benefits, including:

- economies of scale
- diversification
- access to professional investment management
- access to geographical markets, asset classes or investment strategies which might otherwise be inaccessible to the individual investor
- in some cases, the benefit of regulatory oversight, and
- in some cases, tax deferral.

The value of shares and most other investments can fall as well as rise. Some might fall spectacularly, such as when Enron collapsed or when banks had to be bailed out during the financial crisis. However, when an investor holds a diversified pool of investments in a portfolio, the risk of single constituent investments falling spectacularly could be offset by outperformance on the part of other investments. In other words, risk is lessened when the investor holds a diversified portfolio of investments (of course, the opportunity of a startling outperformance is also diversified away – however, many investors are happy with this if it reduces their risk of total or significant loss).

An investor needs a substantial amount of money before they can create a diversified portfolio of investments directly. If an investor has only US$3,000 to invest, and wants to buy the shares of 30 different companies, each investment would be US$100. This would result in a large amount of the US$3,000 being spent on commission, since there will be minimum commission rates of, say, US$10 on each purchase.

Alternatively, an investment of US$3,000 might go into an investment fund with, say, 80 different investments, but, because the investment is being pooled with that of lots of other investors, the commission as a proportion of the fund is very small.

An investment fund might also be invested in shares from many different sectors; this achieves diversification from an industry perspective (thereby reducing the risk of investing in a number of shares whose performance is closely correlated). Alternatively, it may invest in a variety of bonds. Some investment funds limit the size of investment into bank deposits or the amount they can invest into other investment funds.

The other main rationale for investing collectively is to access the investing skills of the fund manager. Fund managers follow their chosen markets closely and will carefully consider what to buy and whether to keep or sell their chosen investments. Few investors have the skill, time or inclination to do this as effectively themselves.

However, fund managers do not manage portfolios for nothing. They might charge investors' fees to become involved in their CIS (entry fees or initial charges) or to leave (exit charges), plus annual management fees. These fees are needed to cover the fund managers' salaries, technology, research, dealing, settlement and risk management systems, and to provide a profit. Equally, there is no guarantee that professional management will deliver superior results and that investment funds will not suffer during market downturns. Indeed, recent research has highlighted that many actively managed funds consistently fail to beat their benchmarks, which has given rise to a growing debate between proponents of active versus passive investing (see below) and placed pressure on actively managed funds to reduce their charges.

1.2 Investment Strategies

Learning Objective

7.1.2 Know the difference between active and passive (eg, index) management

7.1.3 Know the types of funds and how they are classified

There is a wide range of funds with many different investment objectives and investment styles. Each of these funds has an investment portfolio managed by a fund manager according to a clearly stated set of objectives.

An example of an objective might be to invest in the shares of UK companies with above-average potential for capital growth and to outperform the FTSE (Financial Times Stock Exchange) All-Share index. Other funds' objectives could be to maximise income or to achieve steady growth in capital and income.

In each case, it will also be clear what the fund manager will invest in; for example, shares and/or bonds and/or property and/or cash or money instruments; and whether derivatives will be used to hedge currency or other market risks.

It is also important to understand the investment style the fund manager adopts. Investment styles refer to the fund manager's approach to choosing investments and meeting the fund's objectives. In this section, we will look at the difference between active and **passive management**.

1.2.1 Passive Management (Indexation)

Indexation, popularly known as passive management, is seen in those types of investment funds that are often described as index-tracker funds. Index-tracking, or indexation, involves constructing a portfolio in such a way that it will track, or mimic, the performance of a recognised index. Index funds have been one of the fastest growing areas of investment.

Indexation is undertaken on the assumption that securities markets are efficiently priced and cannot therefore be consistently outperformed. Consequently, no attempt is made to forecast future events or outperform the broader market.

The advantages of employing indexation include the following:

- Relatively few active portfolio managers consistently outperform benchmark indices.
- Once set up, passive portfolios are generally less expensive to run than active portfolios, given a lower ratio of staff to funds managed and lower portfolio turnover.

The disadvantages of adopting indexation, however, include the following:

- Performance is affected by the need to manage cash flows, rebalance the portfolio to replicate changes in index constituent weightings and adjust the portfolio for stocks coming into, and falling out of, the index. This can lead to tracking error if the performance does not match that of the underlying index.
- Most indices assume that dividends from constituent equities are reinvested on the ex-dividend (xd) date, whereas a passive fund can only invest dividends when they are received, up to six weeks after the share has been declared ex-dividend.
- Indexed portfolios may not meet all of an investor's objectives.
- Indexed portfolios follow the index down in bear markets.

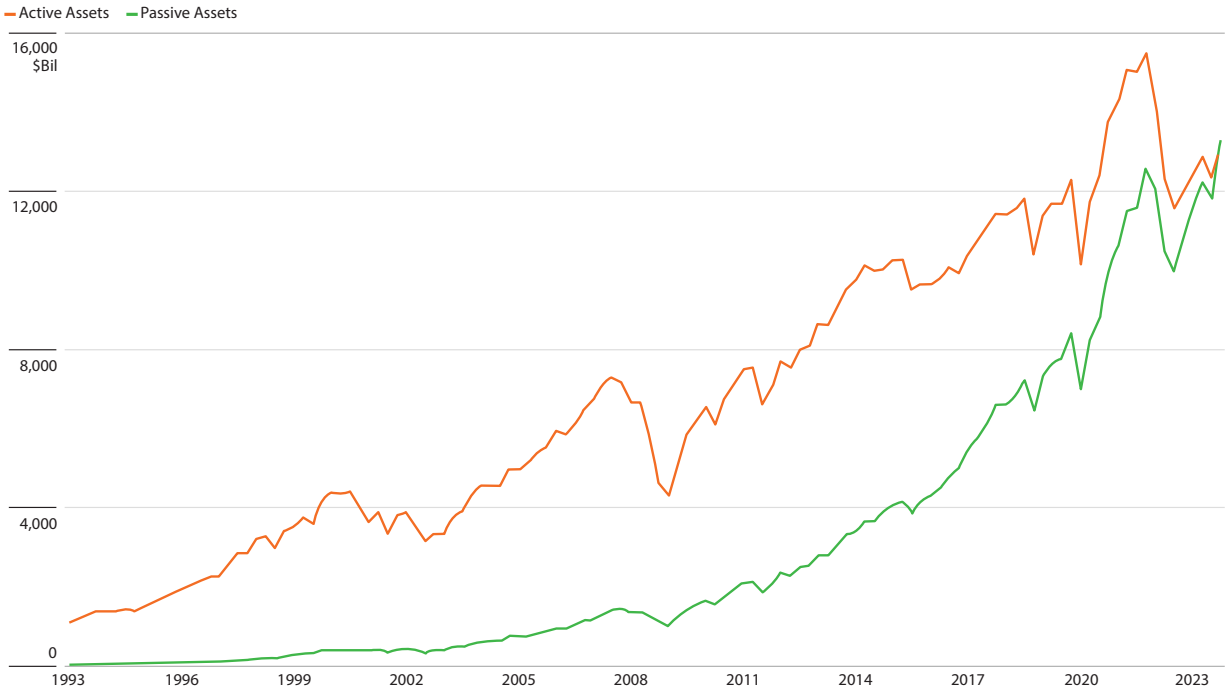
1.2.2 Active Management

In contrast to passive management, **active management** seeks to outperform a predetermined benchmark over a specified period. It does so by employing fundamental and technical analysis to assist in the forecasting of future events, which may be economic or specific to a company, so as to determine the portfolio's holdings and the timing of purchases and sales of securities. Actively managed funds usually have higher charges than those that are passively managed. Over the last decade, assets managed in active funds have contracted as the use of passive management has grown. Morningstar reported that passive funds closed 2023 with more assets for the first time and that:

> *'US equity flows have long favored passive products, international-equity and bond-fund flows have followed suit, helping to get passive funds over the hump.'*

Source: It's Official: Passive Funds Overtake Active Funds | Morningstar (https://www.morningstar.com/funds/recovery-us-fund-flows-was-weak-2023)

This trend has impacted: the number of active managers who remain to invest, the research conducted on assets, and the sectors and asset classes active managers still operate in, with certain sectors becoming largely systematic, such as US large caps (eg, S&P500 index).



Within active management, two commonly used terms in this context are 'top-down' and 'bottom-up'. Top-down means that the manager focuses on economic and industry trends rather than the prospects of particular companies. Bottom-up means that the analysis of a company's net assets, future profitability and cash flow and other company-specific indicators is a priority.

Included in the bottom-up approach is a range of investment styles, including:

- **growth investing** – which is picking the shares of companies with present opportunities to grow significantly in the long term
- **value investing** – which is picking the shares of companies that are undervalued relative to their present and future profits or cash flows
- **momentum investing** – which is picking the shares whose share price is rising on the basis that this rise will continue, and
- **contrarian investing** – the flip side of momentum investing, which involves picking shares that are out of favour and may have hidden value.

There is also a significant range of styles used by managers of hedge funds (hedge funds are considered in section 5.)

1.2.3 Combining Active and Passive Management

Having considered both active and passive management, it should be noted that active and passive investment are not, in of themselves, mutually exclusive. Combining the two has some merit. This should appear self-evident given that active management increasingly only outperforms indices in certain sectors consistently, while passive investing is often constrained by benchmark development and appears to operate efficiently in only a relatively concentrated number of asset classes and sectors.

Index-trackers and actively managed funds can be combined in what is known as core-satellite management. This is achieved by indexing, say, 70% to 80% of the portfolio's value (the core), so as to minimise the risk of underperformance, and then fine-tuning this by investing the remainder in a number of specialist actively managed funds or individual securities. This is the satellite element of the fund.

Another alternative is the use of systematic (smart beta) funds. These are strategies that can combine elements of both traditional index-tracking and active investing by applying rules and tilts to conventional indices to produce better returns, address investor biases, reduce risk, or else to exploit perceived or observed market inefficiencies. For example, they might seek to outperform traditional passive strategies by targeting value-creating investment ideas, such as finding bargains (value), following a trend (momentum) or seeking safety (minimum volatility).

1.3 Fund Classification

Fund classification generally involves grouping funds with similar objectives. Not only does this allow investors to match their objectives with funds that meet those objectives, but it also allows investors to compare funds that have similar objectives. Most funds are broadly categorised between those designed to provide 'income' and those designed to provide 'growth'. Those funds that do not fall easily under these headings are in other categories entitled capital protection, specialist funds, volatility-managed, absolute/target return or unclassified.

2. Open-Ended Funds

Learning Objective

7.2.1 Know the characteristics and different types of open-ended fund/mutual fund: US; Europe

An open-ended fund is an investment fund that can issue and redeem shares at any time. Each investor has a pro rata share of the underlying portfolio and so will share in any growth of the fund. The value of each share is in proportion to the total value of the underlying investment portfolio.

If investors wish to invest in an open-ended fund, they approach the fund directly and provide the money they wish to invest. The fund can create new shares in response to this demand, issuing new shares or units to the investor at a price based on the value of the underlying portfolio. If investors decide to sell, they again approach the fund, which will redeem the shares and pay the investor the value of their shares, again based on the value of the underlying portfolio.

An open-ended fund can, therefore, expand and contract in size based on investor demand, which is why it is referred to as open-ended.

2.1 US Open-Ended Funds

As previously noted, the US is the largest fund market. The most well-known type of US investment fund is a mutual fund, as defined by the Investment Company Act of 1940 (the '40 Act'). Legally, it is known as an 'open-end company' under federal securities laws. A mutual fund is one of three main types of investment fund in the US; the others are considered later in this chapter in the section on closed-ended funds.

Some of their key distinguishing characteristics include the following:

- The mutual fund can create and sell new shares to accommodate new investors.
- Investors buy mutual fund shares directly from the fund itself, rather than from other investors on a secondary market such as the New York Stock Exchange (NYSE) or National Association of Securities Dealers Automated Quotations (NASDAQ).
- The price that investors pay for mutual fund shares is based on the fund's net asset value (the NAV, which is the value of the underlying investment portfolio) plus any charges made by the fund.
- The investment portfolios of mutual funds are typically managed by separate entities known as investment advisers, who are registered with the Securities Exchange Commission (SEC), the US regulator.

Investors can place instructions to buy or sell shares in mutual funds by contacting the fund directly. However, in practice, most mutual fund shares are sold mainly through brokers, banks, financial planners or insurance agents.

The price that an investor will pay to buy shares or will receive when they are redeemed is based on the NAV of the underlying portfolio. A mutual fund will value its portfolio daily in order to determine the value of its investments, and from this calculate the price at which investors will deal. The NAV is available from the fund, on its website and in the financial pages of major newspapers.

When an investor buys shares, they pay the current NAV per share plus any fee the fund imposes. When an investor sells their shares, the fund will pay them the NAV minus any charges made for redemption of the shares. All mutual funds will redeem or buy back an investor's shares on any business day and must send payment within seven days.

Operating a mutual fund involves costs such as shareholder transaction charges, investment advisory fees, and marketing and distribution expenses. Mutual funds pass along these costs to investors by imposing charges. SEC rules require mutual funds to disclose both shareholder fees and operating expenses in a fee table near the front of a fund's prospectus.

The tax treatment of a US fund varies depending on its type. For example, some funds are classed as tax-exempt funds, such as a municipal bond fund where all of the dividends are exempt from federal and sometimes state income tax, although tax is due on any capital gains.

For other mutual funds, income tax is payable on any dividends and gains made when the shares are sold. In addition, investors may also have to pay taxes each year on the fund's capital gains. This is because US law requires mutual funds to distribute capital gains to shareholders if they sell securities for a profit that cannot be offset by a loss.

The tax treatment of mutual funds for non-US residents means that, in practice, funds domiciled in Europe or elsewhere are more likely to be suitable.

2.2 European Open-Ended Funds

In the world's second largest fund market, Europe, three main types of funds are encountered – SICAVs, unit trusts and OEICs.

As mentioned in section 1 of this chapter, many of these are structured as UCITS funds. UCITS refers to a series of EU regulations that were originally designed to facilitate the promotion of funds to retail investors across Europe. A UCITS fund, therefore, complies with the requirements of these directives, regardless of which EU country it is established in.

The directives have been issued with the intention of creating a framework for cross-border sales of investment funds. They allow an investment fund to be sold throughout the EU, subject to regulation by its home country regulator.

The key point to note, therefore, is that when an investment fund first seeks authorisation from its regulator, it will seek authorisation as a UCITS fund. For example, instead of an investment fund being authorised by the Luxembourg regulator solely for marketing to the general public in Luxembourg, approval as a UCITS fund means that it can be marketed across the EU.

While UCITS regulations are not directly applicable outside of the EU, other jurisdictions, such as Switzerland and Hong Kong, recognise UCITS when funds are applying for registration to sell into those countries. In many countries, UCITS is seen as a brand that signifies the quality of how a fund is managed, administered and supervised by regulators.

2.2.1 SICAVs and Fonds Commun de Placement (FCP)

As mentioned in section 1, Luxembourg is one of the main centres for funds that are to be distributed to investors across European borders and globally. The main US fund groups along with their European counterparts manage huge fund ranges from Luxembourg, which are then distributed and sold not just across Europe, but in the Middle East and Asia as well.

The main type of open-ended fund that is encountered is a SICAV – a *Société d'Investissement à Capital Variable*, which translates as an ICVC or, in other words, an OEIC.

Some of the main characteristics of SICAVs include the following:

- They are open-ended, so new shares can be created or shares can be cancelled to meet investor demand.
- Dealings are undertaken directly with the fund management group or through their network of agents.
- They are typically valued each day and the price at which shares are bought or sold is directly linked to the NAV of the underlying portfolio.
- They are single-priced, which means that the same price is used when buying or selling and any charges for purchases are added on afterwards.
- They are usually structured as an umbrella fund, which means that each fund will have multiple other funds sitting under one legal entity. This often means that switches from one fund to another can be made at a reduced charge or without any charge at all.
- Their legal structure is a company which may be domiciled in Luxembourg and, although some of the key aspects of the administration of the fund must also be conducted there, the investment management is often undertaken in London or another European capital.

The other main type of structure encountered in Europe is the FCP. Like unit trusts (which are considered in more detail below), FCPs do not have a legal personality; instead, their structure is based on a contract between the scheme manager and the investors. The contract provides for the funds to be managed on a pooled basis.

As FCPs have no legal personality, they have to be administered by a management company, but otherwise the administration is very similar to that described above for SICAVs.

2.2.2 Unit Trusts

A unit trust is an investment fund that is established as a trust in which the trustee is the legal owner of the underlying assets and the unitholders are the beneficial owners.

As with other types of open-ended funds, the trust can grow as more investors buy into the fund or shrink as investors sell units back to the fund and they are cancelled. As with SICAVs, investors deal directly with the fund when they wish to buy and sell.

The major differences between unit trusts and the open-ended funds we have already looked at are the parties to the trust and how the units are priced.

The main parties to a unit trust are the unit trust manager and the trustee:

- The role of the unit trust manager is to decide, within the rules of the trust and the various regulations, which investments are included within the unit trust. This will include deciding what to buy and when to buy it, as well as what to sell and when to sell it. The unit trust manager may outsource this decision-making to a separate investment manager. The manager also provides a market for the units by dealing with investors who want to buy or sell units. It also carries out the daily pricing of units based on the NAV of the underlying constituents.
- Every unit trust must also appoint a trustee. The trustee is the legal owner of the assets in the trust, holding the assets for the benefit of the underlying unitholders. The trustee also protects the interests of the investors by, among other things, monitoring the actions of the unit trust manager. Whenever new units are created for the trust, they are created by the trustee. The trustees are organisations that the unitholders can trust with their assets, normally large banks or insurance companies.

Just as with other investment funds, the price that an investor pays to buy a unit trust, or receives when they sell, is based on the NAV of the underlying portfolio. However, generally, the pricing of units in a unit trust is done on a **dual-priced** basis rather than the single-priced basis adopted by SICAVs:

- The underlying portfolio of a unit trust is valued daily at both the bid and offer prices for the investments contained within the portfolio.
- This produces two NAVs, one representing the value at which the portfolio's investments can be sold and another for how much they will cost to buy.
- These values are then used to calculate two separate prices, one at which investors can sell their units and one which the investor pays to buy units.

For this reason, unit trusts are described as dual-priced. They have a bid price, which is the price the investor receives if they are selling, and an offer price, which is the price the investor pays if buying. The difference between the two is known as the bid-offer spread.

Any initial charges made by the unit trust for buying the fund are included within the offer price that is quoted.

2.2.3 Open-Ended Investment Companies (OEICs)

An OEIC is another form of investment fund found in Europe. They are a form of ICVC that is structured as a company with the investors holding shares.

The term 'OEIC' is used mostly in the UK, while in Ireland they are known as a variable capital company (VCC). They have similar structures to SICAVs and, as with SICAVs and unit trusts, investors deal directly with the fund when they wish to buy and sell.

The key characteristics of OEICs are the parties that are involved and how they are priced.

- When an OEIC is set up, it is a requirement that an **authorised corporate director (ACD)** and a depository are appointed. The ACD is responsible for the day-to-day management of the fund, including managing the investments, valuing and pricing the fund, and dealing with investors. It may undertake these activities itself or delegate them to specialist third parties.

- The fund's investments are held by an independent depositary responsible for looking after the investments on behalf of the fund's shareholders and overseeing the activities of the ACD. The depositary plays a similar role to that of the trustee of a unit trust. The depositary is the legal owner of the fund investments and the OEIC itself is the beneficial owner, not the shareholders.

The register of shareholders is maintained by the ACD.

An OEIC has the option to be either single-priced or dual-priced. In fact, most OEICs operate single pricing. Single pricing refers to the use of the mid-market prices of the underlying assets to produce a single price at which investors buy and sell. In other words, when a fund is single-priced, its underlying investments will be valued based on their mid-market value. This method of pricing does not provide the ability to recoup dealing expenses and commissions within the price. Such charges are instead separately identified for each transaction. It is important to note that the initial charge will be charged separately when comparing single-pricing to dual-pricing.

3. Closed-Ended Investment Companies

Learning Objective

7.3.1 Know the characteristics of closed-ended investment companies: share classes; gearing; real estate investment trusts (REITs)

7.3.2 Know the meaning of the discounts and premiums in relation to the pricing of closed-ended investment companies

7.3.3 Know how closed-ended investment companies' shares are traded

---

A closed-ended investment company is another form of investment fund. When they are first established, a set number of shares is issued to the investing public, and these are then subsequently traded on a stock market. Investors wanting to subsequently buy shares do so on the stock market from investors who are willing to sell.

The capital of the fund is, therefore, fixed and does not expand or contract in the way that an open-ended fund's capital does. For this reason, they are referred to as closed-ended funds in order to differentiate them from mutual funds, SICAVs, unit trusts and OEICs.

3.1 Characteristics of Closed-Ended Investment Companies

Closed-ended investment companies are found in both the US and Europe.

3.1.1 US

In the US, they are referred to as closed-end funds and are one of the three basic types of investment companies alongside mutual funds (see section 2.1) and unit investment trusts.

Closed-end funds come in many varieties and can have different investment objectives, strategies and investment portfolios. They also can be subject to different risks, volatility and charges. They are permitted to invest in a greater amount of illiquid securities than are mutual funds. (An illiquid security

generally is considered to be a security that cannot be sold within seven days at the approximate price used by the fund in determining NAV.) Due to this feature, funds that seek to invest in markets where the securities tend to be more illiquid are typically organised as closed-end funds.

The other main type of US investment company is a unit investment trust (UIT). A UIT does not actively trade its investment portfolio; instead, it buys a relatively fixed portfolio of securities – for example, five, ten or 20 specific stocks or bonds – and holds them with little or no change for the life of the fund.

Like a closed-end fund, it will usually make an initial public offering of its shares (or units), but the sponsors of the fund will maintain a secondary market, which allows owners of UIT units to sell them back to the sponsors and allows other investors to buy UIT units from the sponsors.

3.1.2 Europe

In Europe, closed-ended funds are usually known as **investment trusts** and, more recently, as investment trust companies.

Investment trusts were one of the first investment funds to be set up. The first funds were set up in the UK in the 1860s, and, in fact, the very first investment trust to be established is still operating today. Its name is Foreign & Colonial Investment Trust, and it is a global growth trust that invests in over 30 markets and has around £2 billion of funds under management.

Despite its name, an investment trust is actually a company, not a trust. As a company, it has directors and shareholders. However, like a unit trust, an investment trust will invest in a range of investments, allowing its shareholders to diversify and lessen their risk.

Some investment trust companies have more than one type of share. For example, an investment trust might issue both ordinary shares and preference shares. Such investment trusts are commonly referred to as split capital investment trusts.

In contrast with OEICs and unit trusts, investment trust companies are allowed to borrow money on a long-term basis by taking out bank loans and/or issuing bonds. This can enable them to invest the borrowed money in more stocks and shares – a process known as gearing or leverage. Also, some investment trusts have a fixed date for their winding-up.

3.2 Share Classes

Some investment trust companies might issue both ordinary and preference shares. A split-capital investment trust, which has a limited life, will issue other classes of shares. For example, an investment trust might issue both ordinary shares and preference shares.

Preference shares can be issued on different terms, such as convertible preference shares that are convertible into ordinary shares or as zero dividend preference (ZDP) shares. As the name suggests, ZDPs receive no dividends and the investor instead receives their return via the difference between the price they paid and the amount they receive when the ZDP is repaid at a fixed future date.

3.3 Pricing, Discounts and Premiums

The price of a share is what someone is prepared to pay for it. The price of a share in a closed-ended investment company is no different.

The share prices for closed-ended investment companies are, therefore, arrived at in a very different way from an open-ended fund.

Remember that units in a unit trust are bought and sold by their fund manager at a price that is based on the underlying value of the constituent investments. Shares in an OEIC are bought and sold by the ACD, again at the value of the underlying investments.

The share price of a closed-ended investment company, however, is not necessarily the same as the value of the underlying investments. It will value the underlying portfolio daily and provide details of the NAV to the stock exchange on which it is quoted and traded. The price it subsequently trades at, however, will be determined by demand and supply for the shares, and may be above or below the NAV.

When the share price is above the NAV, it is said to be trading at a premium. When the share price is below the NAV, it is said to be trading at a discount.

Example

ABC Investment Trust shares are trading at £2.30. The NAV per share is £2.00. ABC Investment Trust shares are trading at a premium. The premium is 15% of the underlying NAV.

Example

XYZ Investment Trust shares are trading at £1. The NAV per share is £1.05. XYZ Investment Trust shares are trading at a discount. The discount is 4.76% of the underlying NAV.

Investment trust company shares generally trade at a discount to their NAV.

A number of factors contribute to the extent of the discount, which will vary across different investment companies and have an impact on yield; for example, a discount can enhance the dividend yield of a closed-ended investment trust. There is still much debate about the actual cause of discounts in closed-ended funds, such as investment trust companies. One reason could be a reflection of poor performance in the management of the fund or an overcharge of management fees. The theory that investment trusts can trade at a discount if the managers charge a fee has been around since the 1970s. There is a suggestion that if fund managers charge investors a fee but fail to add value to their investments, then the value of the fund is likely to be less than its NAV. Other factors identified as contributing to discounts include the potential for taxes on gains within the fund (unrealised gains that may one day be realised) and, finally, agency costs that may vary according to the agency issues or conflicts that may occur due to different interests between agents (those who run the trust) and principals (the shareholders who have an ownership stake in the trust). What is generally observed is that a smaller discount (or even a premium) will be displayed when investment trusts are nearing their winding-up, or are about to undergo some corporate activity, such as a merger/takeover.

3.4 Trading in Investment Trust Company Shares

In the same way as other listed company shares, shares in investment trust companies are bought and sold on a stock exchange such as the NYSE or the London Stock Exchange (LSE).

3.5 Real Estate Investment Trusts (REITs)

Real estate investment trusts (REITs) are well established in countries such as the US, the UK, Australia, Germany, Canada and France. The US remains the largest market, but the fastest growing market is Asia Pacific (APAC). Globally, the market was valued at $2.6 trillion in 2022, and is projected to reach $4.2 trillion by 2032.

REITs are normal investment companies that pool investors' funds to invest in commercial, and possibly residential, property.

One of the main features of REITs is that they provide access to property returns without the previous disadvantage of double taxation. Until recently, when an investor held property company shares, not only would the company pay corporation tax, but the investor would be liable to tax on dividends and any growth. Under the rules for REITs, no corporation tax is payable, providing that certain conditions are met, and distributions are instead taxable on the investor.

REITs give investors access to professional property investment and might provide them with new opportunities, such as the ability to invest in commercial property. This allows them to diversify the risk of holding direct property investments.

This type of investment trust also removes a further risk from holding direct property, namely liquidity risk or the risk that the investment cannot be readily realised. REITs are closed-ended funds and are quoted on stock exchanges, and shares in REITs are bought and sold in the same way as other investment trusts.

4. Exchange-Traded Funds (ETFs)

Learning Objective

7.4.1 Know the main characteristics of exchange-traded funds: trading; replication methods; synthetic/non-synthetic

An exchange-traded fund (ETF) is a type of investment fund and exchange-traded product with shares that are tradeable on a stock exchange. ETFs are designed to track the performance of a specific index, commodity, bond or a basket of assets. The creation and functioning of an ETF involves several participants and a unique creation and redemption process.

4.1 Participants

Authorised Participants (APs)

Authorised participants (APs) are typically large financial institutions, such as market makers or institutional investors, that are authorised to create or redeem shares of an ETF. They play a crucial role in maintaining the balance between the ETF's market price and its net asset value (NAV).

ETF Sponsor

The ETF sponsor is the entity that creates and manages the ETF. The sponsor is responsible for designing the investment strategy, managing the portfolio and ensuring compliance with regulatory requirements. The sponsor works with other service providers, such as custodians and administrators, to facilitate the creation and redemption process.

Custodian

The custodian is responsible for holding the underlying assets of the ETF. They ensure the safekeeping and proper management of the securities that make up the ETF's portfolio.

Market Makers

Market makers facilitate the buying and selling of ETF shares on the stock exchange. They help maintain liquidity in the market by quoting bid and ask prices and actively trading shares. Market makers can also be authorised participants or independent entities.

4.2 Creation and Redemption Process

The ETF sponsor works with authorised participants to create new shares of the ETF. The sponsor provides a list of the underlying securities that make up the ETF's portfolio to the AP. The AP assembles the basket of securities and delivers them to the custodian in exchange for a block of ETF shares (known as a creation unit). The creation unit is then divided into individual ETF shares and sold on the stock exchange.

The redemption process is the reverse of creation. APs can redeem ETF shares for the underlying securities. APs deliver a creation unit of ETF shares to the custodian in exchange for the underlying securities. The ETF sponsor then cancels the redeemed shares, and the process helps manage supply and demand, keeping the ETF's market price close to its NAV.

The creation and redemption process allows ETFs to maintain price efficiency and liquidity, making them an attractive investment option for many investors.

ETFs use passive investment management, which is a method of managing an investment portfolio that seeks to match the performance of a broad-based market index. Its investment style is described as passive because portfolio managers do not make decisions about which securities to buy and sell; instead, they invest in the same securities that make up an index. It, therefore, seeks to hold a portfolio that mirrors the index it is tracking and undertakes trading only to ensure that the portfolio's performance is in line with the index.

Most index tracker funds are based on market capitalisation-weighted indices, such as the FTSE 100 or S&P 500, where the largest stocks in the index by market value have the biggest influence on the index's value. The fund will seek to track the index using either physical or synthetic replication.

Physical replication is the traditional form of index replication and is the one favoured by the largest and long-established ETF providers. It employs one of three established tracking methods:

1. **Full replication** – this method requires each constituent of the index being tracked to be held in accordance with its index weighting. Although full replication is accurate, it is also the most expensive of the three methods and so is only really suitable for large portfolios.
2. **Stratified sampling** – this method requires a representative sample of securities from each sector of the index to be held. Although this method is less expensive, the lack of statistical analysis renders it subjective and potentially encourages biases towards those stocks with the best perceived prospects.
3. **Optimisation** – this method costs less than fully replicating the index tracked, but is statistically more complex. Optimisation uses a sophisticated computer modelling technique to find a representative sample of those securities which mimic the broad characteristics of the index tracked.

Synthetic replication involves the fund manager entering into a swap (an OTC derivative) with a market counterparty to exchange the returns on the index for a payment. The advantage of this approach is that responsibility for tracking the index performance is passed on to the swap provider and costs are lower. The downside is that the investor is exposed to counterparty risk, namely that the swap provider fails to meet their obligations.

ETF shares may trade at a premium or discount to the underlying investments, but the difference is usually minimal and the ETF share price essentially reflects the value of the investments in the fund. ETFs have an inherent arbitrage mechanism that helps to keep the share price in line with the NAV. APs can create or redeem ETF shares based on the demand in the market. When the ETF's market price deviates from its NAV, APs have an incentive to either buy the underlying securities and exchange them for ETF shares (if the ETF is trading at a discount) or vice versa (if the ETF is trading at a premium). This continuous arbitrage activity helps align the ETF's share price with the value of its underlying assets.

The investor's return is in the form of dividends paid by the ETF, and the possibility of a capital gain (or loss) on sale.

Shares in ETFs are bought and sold through a stockbroker on a stock exchange and exhibit the following charges:

- There is a spread between the price at which investors buy the shares and the price at which they can sell them. This is usually very small, for example, just 0.1% or 0.2% for, say, an ETF tracking the FTSE 100.
- An annual management charge is deducted from the fund. Typically, this is 0.5% or less.
- The investors pay stockbroker's commission when they buy and sell.

5. Alternative Investment Funds (AIFs)

5.1 Hedge Funds

Learning Objective

7.5.1 Know the basic characteristics of hedge funds: risks; cost and liquidity; investment strategies

Hedge funds are reputed to be high risk. However, in many cases, this perception stands at odds with reality. In their original incarnation, hedge funds sought to eliminate or reduce market risk. That said, there are now many different styles of hedge fund – some risk-averse, and some employing highly risky strategies. It is, therefore, not wise to generalise about them.

The most obvious market risk is the risk that is faced by an investor in shares – as the broad market moves down, the investor's shares also fall in value. Traditional 'absolute return' hedge funds attempt to profit regardless of the general movements of the market by carefully selecting a combination of asset classes, including derivatives, and by holding both long and short positions (a short position may involve the selling of shares which the fund does not at that time own in the hope of buying them back more cheaply if the market falls).

However, innovation has resulted in a wide range of complex hedge fund strategies, some of which place a greater emphasis on producing highly geared returns than on controlling market risk.

Many hedge funds have high initial investment requirements, meaning that access is effectively restricted to wealthy investors and institutions.

The common aspects of hedge funds include the following:

- **Structure** – most hedge funds are established as unauthorised and therefore unregulated CISs, meaning that they cannot be generally marketed to private individuals because they are considered too risky for the less financially sophisticated investor.
- **High investment entry levels** – most hedge funds require minimum investments in excess of US$500,000; some exceed US$1 million.
- **Investment flexibility** – because of the lack of regulation, hedge funds are able to invest in whatever assets they wish (subject to compliance with the restrictions in their constitutional documents and prospectus). In addition to being able to take long and short positions in securities like shares and bonds, some take positions in commodities and currencies. Their investment style is generally aimed at producing absolute returns – positive returns regardless of the general direction of market movements.
- **Gearing** – many hedge funds can borrow funds and use derivatives to potentially enhance returns. This is sometimes also referred to as leverage.
- **Liquidity** – to maximise the hedge fund manager's investment freedom, hedge funds usually impose an initial 'lock-in' period of between one and three months before investors can sell their investments on. This allows the fund manager to increase the notional market exposure (for example, through using derivatives or carry trades). That exposure to the market can then be at many multiples to the cash (nominal) value of the investment.

- **Cost** – hedge funds typically levy performance-related fees which the investor pays if certain performance levels are achieved, otherwise paying a fee comparable to that charged by other growth funds. Performance fees can be substantial, with 20% or more of the net new highs (also called the 'high water mark') being common.

5.2 Private Equity

Learning Objective

7.5.2 Know the basic characteristics of private equity: raising finance; realising capital gain

Private equity is medium- to long-term finance provided in return for an equity stake in potentially high-growth companies. It can take many forms, from providing venture capital to complete buy-outs.

Private equity was one of the fastest growing asset classes in recent years until 2022. More recently, the sector has fallen back in the face of the rising cost of financing, as spiking interest rates interrupted dealmaking in 2023. Both deal value and deal count fell by 60% and 35% respectively in 2023[4] from their peaks in 2021.

For a firm, attracting private equity investment is very different from raising a loan from a lender. Private equity is invested in exchange for a stake in a company and, as shareholders, the investors' returns are dependent on the growth and profitability of the business. They, therefore, face the risk of failure, just like the other shareholders.

The private equity firm is rewarded by the company's success, generally achieving its principal return through realising a capital gain on exit. This may involve:

- the private equity firm selling its shares back to the management of the investee company
- the private equity firm selling the shares to another investor, such as another private equity firm
- a trade sale, that is the sale of company shares to another firm, or
- the company achieving a stock market listing.

Private equity firms raise their capital from a variety of sources, but mainly from large investing institutions. These may be happy to entrust their money to the private equity firm because of its expertise in finding businesses with good potential.

Few people or institutions can afford the risk of investing directly in individual buy-outs and, instead, use pooled vehicles to achieve a diversification of risk. Traditionally, this was through investment trusts, such as 3i or Electra Private Equity.

With the increasing number of funds being raised for this asset class, methods of raising investment have moved on. Private equity arrangements are now usually structured in different ways from retail investment funds. They are usually set up as limited partnerships with high minimum investment requirements or as private placement funds. Like hedge funds, there are generally restrictions on when an investor can realise their investment.

4 Private Equity Outlook 2024: Industry Trends | Bain & Company (https://www.bain.com/insights/private-equity-outlook-liquidity-imperative-global-private-equity-report-2024/)

End of Chapter Questions

Think of an answer for each question and refer to the appropriate section for confirmation.

1. **How can the pooling of funds via a collective investment scheme (CIS) benefit a retail investor?**
   Answer Reference: Section 1.1

2. **What is an investment management approach that seeks to produce returns in line with an index known as?**
   Answer Reference: Section 1.2.1

3. **What are the advantages and disadvantages of indexation?**
   Answer Reference: Section 1.2.1

4. **Identify investment styles that are typically used in bottom-up strategies.**
   Answer Reference: Section 1.2.2

5. **For which type of collective investment vehicle would the fund manager most likely quote bid and offer prices?**
   Answer Reference: Section 2.2.2

6. **How does the trading and settlement of a unit trust differ from an exchange-traded fund (ETF)?**
   Answer Reference: Sections 2.2.2 and 4

7. **Who is the legal owner of the investments held in an open-ended investment company (OEIC)?**
   Answer Reference: Section 2.2.3

8. **What are some of the principal ways in which a closed-ended fund differs from unit trusts and OEICs?**
   Answer Reference: Section 3.1.2

9. **Which is an open-ended type of investment vehicle that is traded on a stock exchange?**
   Answer Reference: Section 4

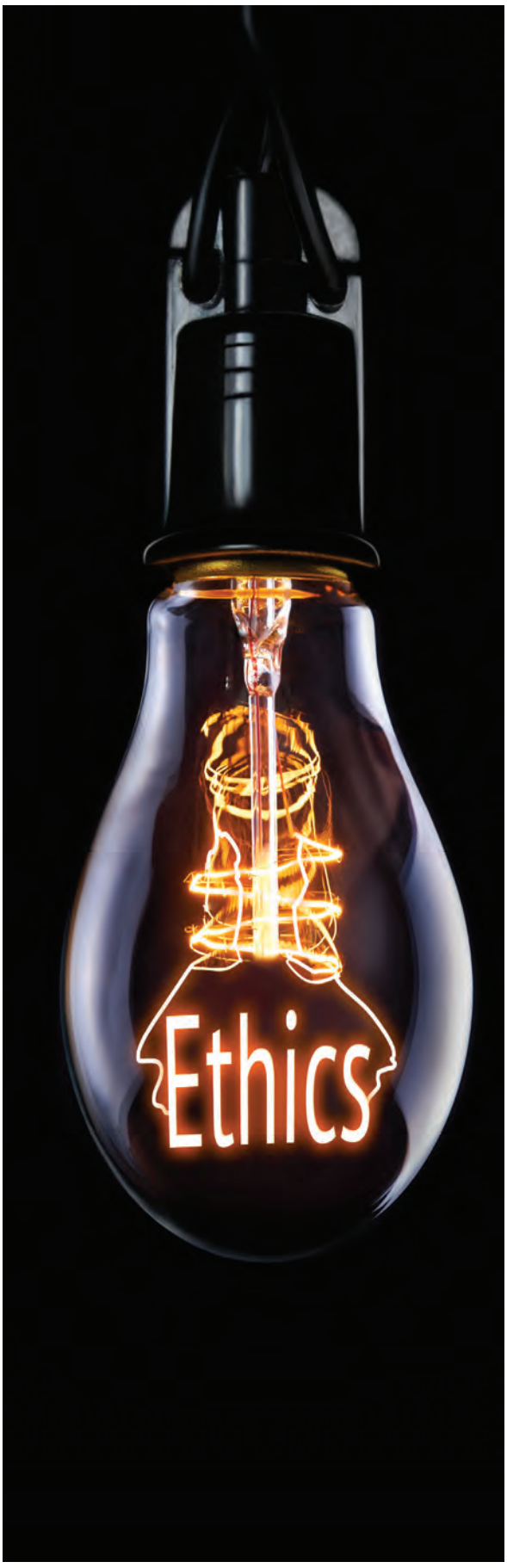
10. **What type of investment vehicle makes extensive use of short positions?**
    Answer Reference: Section 5.1

Chapter Eight

Regulation and Ethics

1. **Introduction** 165
2. **Financial Crime** 169
3. **Market Abuse (including Insider Dealing)** 173
4. **Integrity and Ethics in Professional Practice** 175

This syllabus area will provide approximately 5 of the 50 examination questions



1. Introduction

Having now considered so many varied markets, structures and assets, what separates well-functioning markets from chaos is some application of rules. Therefore, an understanding of regulation is essential in today's investment world. In this chapter, we will aim to take an overview of regulation by looking at it in an international context before looking at the essential role of integrity and ethics in the financial services sector.

1.1 The Need for Regulation

Learning Objective

8.1.1 Understand the need for regulation and authorisation of firms

The risk of losing money that can arise from many types of financial transactions has meant that financial markets have always been subject to the need for rules and codes of conduct to protect investors and the general public, although these rules have not always been in place or enforced as robustly as they are today.

As markets developed, there grew a need for market participants to be able to set rules so that there were agreed standards of behaviour and to provide a mechanism so that disputes could be settled readily. This need developed into what is known as self-regulation, when, for example, as well as fulfilling its main function of providing a secondary market for shares, a stock exchange would also set rules for its members and police their implementation.

With the development of global financial markets came the need for improved and common standards, as well as international cooperation. Self-regulation became increasingly untenable and most countries moved to a statutory approach (that is, with rules laid down by law so that breaking them is a criminal offence). They also established

their own independent regulatory bodies. The need for international cooperation between regulatory bodies also led to the creation of an international organisation, the International Organization of Securities Commissions (IOSCO).

IOSCO designs objectives and standards that are used by the world's regulators as international benchmarks for all securities markets. These objectives and standards can be seen in most systems of securities regulation. Today, there is a significant level of cooperation between financial services regulators worldwide, and, increasingly, they are imposing common standards. Anti-money laundering (AML) rules are probably the best example.

Effective capital and financial markets are an essential part of developed and developing economies. They fuel economic development and aid wealth creation. Confidence and trust in these markets are vital ingredients. Loss of confidence and trust can result in the failure of financial companies and have an adverse impact on the economy. This, in turn, may lead to a reduction in employment prospects and severe hardship.

As a result, countries set laws and regulations to manage the framework within which financial services businesses and individuals can operate. Different approaches are adopted, such as rules-based systems, principles-based systems and self-regulation, but there is a common theme through these of the need for some form of authorisation of firms that wish to operate in the industry. Regulatory bodies set minimum standards for market participants both for their initial authorisation and their continued operation. The authorisation process normally requires a comprehensive assessment of the applicant to ensure that they are 'fit and proper' and covers areas such as their intended activities, the financial position of the firm and the suitability of its senior management.

In summary, the objectives and benefits of regulation can be viewed as the following:

- It increases the confidence and trust in financial markets, systems and products.
- It helps establish an environment that encourages economic development and wealth creation.
- It reduces the risk of market and system failures (along with the economic consequences of such failures).
- Consumers are better protected, giving them the reassurance they need to save and invest.
- Financial crime is reduced if the financial systems are not an 'easy target' for criminals to exploit.

1.1.1 Authorisation

Financial regulation in a country will usually make it an offence for a firm to provide financial services without being authorised to do so.

Authorisation is granted by the relevant regulator depending on the financial services sector that a firm operates in. The regulator(s) looks at each applicant to assess whether the firm is fit and proper and meets certain threshold conditions. Before granting authorisation, the regulator would usually consider factors such as the company's management, its financial strength and the calibre of its staff. The latter is particularly important in certain key roles, which the regulator (in some jurisdictions) classes as senior management functions (SMFs) or certain other key functions.

By only allowing fit and proper firms to be involved in the financial services sector, the regulator begins to satisfy the objectives of enhancing financial stability, enhancing the integrity of the financial system and protecting consumers.

1.2 Regulatory Principles

Learning Objective

8.1.2 Understand the main aims and activities of financial services regulators

Governments are responsible for setting the role of regulators and, in so doing, will clearly look to see that international best practice is adopted through cooperation with other international regulators and supervisors.

As an example of this, European governments cooperate regionally to ensure there is a framework of regulation that encourages the cross-border provision of financial services across Europe by standardising or harmonising each country's respective approach. European regulators cooperate to coordinate activities and draft the detailed rules needed to introduce pan-European regulation through the European Securities and Markets Authority (ESMA).

In Asia, the basic structure and content of securities regulation is increasingly similar to the model adopted in most other parts of the world. Most countries are members of IOSCO and subscribe to its principles of securities regulation. It is similar in the Middle East where regulators have looked to take examples of best regulatory practice from countries such as the UK and Australia and have then adapted them to their local markets.

The main purposes and aims of regulation in all markets globally are to:

- maintain and promote fairness, efficiency, competitiveness, transparency and orderliness
- promote understanding by the public of the operation and functioning of the financial services sector
- provide protection for members of the public investing in or holding financial products
- minimise crime and misconduct in the industry
- reduce systemic risks
- assist in maintaining the market's financial stability by taking appropriate steps, and
- address the rapid expansion of technology, social media networks and digital finance.

As noted, regulators will typically be given a set of objectives by governments; a summarised example of these from a variety of regulators is shown in the following table.

US – Securities and Exchange Commission (SEC)	UK – Prudential Regulation Authority (PRA) and Financial Conduct Authority (FCA)	Dubai Financial Services Authority (DFSA)	Chinese Securities Regulatory Commission (CSRC)
Foster and enforce compliance with the federal securities laws	Promote the safety and soundness of firms; focusing on the harm that firms can cause to the stability of the financial system	Maintain fairness, transparency and efficiency	Supervision of securities and futures markets
Establish an effective regulatory environment	Secure an appropriate degree of protection for consumers	Maintain confidence in the financial sector	Increase ability to handle and prevent financial crises
Facilitate access to the information investors need to make informed investment decisions	Promote efficiency and choice in the market for financial services	Maintain financial stability and reduce systemic risk	Prepare regulations for securities markets
Enhance SEC performance through effective alignment and management of human, information, and financial capital	Protect and enhance the integrity of the financial system	Prevent conduct that damages the financial services sector	Exercise supervision of securities businesses
		Promote public understanding and protect users of financial services	Investigate and penalise violations of securities laws

2. Financial Crime

2.1 Money Laundering

Learning Objective

8.2.1 Know what money laundering is, the stages involved and the related criminal offences

8.2.2 Know how firms/individuals can be exploited as vehicles for financial crime: fraud; cybercrime; terrorist financing

Money laundering is the process of turning money (including cryptocurrencies) that is derived from criminal activities – often referred to as 'dirty money' – into money (and cryptocurrencies) which appears to have been legitimately acquired and which can, therefore, be more easily invested and spent – in other words, 'clean money'.

The scale of the problem cannot be underestimated. The United Nations Office on Drugs and Crime (UNODC) estimates that between 2–5% of global GDP is laundered each year[1]. That equates to between €715 billion and €1.87 trillion each year.

Money laundering can take many forms, including:

- turning money acquired through criminal activity into clean money
- handling the proceeds of crimes such as theft, fraud and tax evasion
- handling stolen goods
- being directly involved with, or facilitating, the laundering of any criminal or terrorist property, or
- criminals investing the proceeds of their crimes in the whole range of financial products.

Examples of anti-money laundering initiatives include the following:

- The Financial Action Task Force (FATF), which has issued recommendations aimed at setting minimum standards for action in different countries to ensure AML efforts are consistent internationally. It has also issued special recommendations on terrorist financing.
- Standards issued by international bodies to encourage due diligence procedures to be followed for customer identification.
- Sanctions by the United Nations (UN) to deny access to the financial services sector to individuals and organisations from certain countries.
- Guidance issued by the private sector Wolfsberg Group of banks in relation to private banking, correspondent banking and other activities and similar guidance issued by other trade bodies.

1 Money laundering cases registered at Agency doubled in last 6 years according to Eurojust's new report | Eurojust | European Union Agency for Criminal Justice Cooperation (https://www.eurojust.europa.eu/news/money-laundering-cases-registered-agency-doubled-last-6-years-according-eurojusts-new-report#:~:text=Due%20to%20its%20clandestine%20nature%2C%20the%20global%20scale,1.87%20trillion%20Euros%20-%20is%20laundered%20each%20year.)

2.1.1 Stages of Money Laundering

There are three stages to a successful money laundering operation:

- **Placement** is the first stage and typically involves placing the criminally derived cash into an account with a bank or other financial institution.
- **Layering** is the second stage and involves moving the money around in order to make it difficult for the authorities to link the placed funds with the ultimate beneficiary of the money. Disguising the original source of the funds might involve buying and selling foreign currencies, shares or bonds.
- **Integration** is the third and final stage. At this stage, the layering has been successful and the ultimate beneficiary appears to be holding legitimate funds (clean money rather than dirty money). The money is integrated back into the financial system and dealt with as if it were legitimate.

Broadly, the AML provisions are aimed at identifying suspicious activity, including through familiarity with customers, and through reporting suspicions at the placement and layering stages.

In addition, firms are required to keep adequate records so that an audit trail can be established if the need arises.

With the rapid expansion of cryptocurrencies and the **dark web**, the ability of regulators to prevent money laundering has become increasingly challenging.

2.1.2 Terrorist Financing

There can be considerable similarities between the movement of terrorist funds and the laundering of criminal property. Because terrorist groups can have links with other criminal activities, there is inevitably some overlap between AML provisions and the rules designed to prevent the financing of terrorist acts. However, these are two major differences to note between terrorist financing and other money laundering activities:

- Often, only quite small sums of money are required to commit terrorist acts, making identification and tracking more difficult.
- If legitimate funds are used to fund terrorist activities, it is difficult to identify when the funds become terrorist funds.

Terrorist organisations can, however, require significant funding, and will employ modern techniques to manage the funds and transfer them between jurisdictions, hence the similarities with money laundering.

2.2 Other Areas of Financial Crime

Individuals and firms may unwittingly find themselves targeted by criminals and have to be aware of this possibility. An area that staff working in financial services need to be aware of is the theft of customer data to facilitate identity fraud and cybercrime.

Identity fraud or identity theft is one of the fastest growing types of fraud in the UK.

- **Identity fraud** is the use of a misappropriated identity in criminal activity, to obtain goods or services by deception. This usually involves the use of stolen or forged identity documents such as a passport or driving licence.
- **Identity theft** (also known as impersonation fraud) is the misappropriation of the identity (such as the name, date of birth, current address or previous addresses) of another person, without their knowledge or consent. These identity details are then used to obtain goods and services in that person's name.

A person's identity (and their ability to prove it) is central to almost all commercial activity. Organisations need to verify that the person applying for credit or investment services is who they say they are and lives where they claim to live.

The procedures used by organisations to check the information supplied by customers help to detect and prevent most identity fraud. However, some fraudulent applications are accepted due to the sophisticated techniques used by the fraudsters.

When opening accounts in banks and other financial organisations, criminals will use data from legitimate persons to provide information for applications and other purposes which, when checked against normal credit reference, postal and other databases, will seem to confirm the genuine nature of the application.

Key to this is accessing what are known as 'breeder' documents – those documents that allow those who possess them to apply for, or obtain, other documentation and thus build up a profile or 'history' that can satisfy basic customer due diligence (CDD) processes. The information may either be used quickly before the source of the data is alerted or used, for example, as a facilitator for other identities so as not to alert the source.

Other types of fraud include:

- **Telecom fraud** – criminals use telephone deception as a means of perpetuating financial fraud. This usually involves calling victims pretending to be someone else, eg, a friend, relative or someone in a position of authority, and victims are then tricked into parting with their money.
- **Non-delivery fraud** – criminals accept payment for goods and never deliver to the customer.
- **Romance scams** – criminals develop a 'relationship' with victims, usually through social media, with the ultimate goal of obtaining money.

Cybercrime is another fast-growing area of crime.

Although there is no single universal definition of cybercrime, law enforcement generally makes a distinction between two main types of internet-related crime:

- **Advanced cybercrime (or high-tech crime)** – sophisticated attacks against computer hardware and software.
- **Cyber-enabled crime** – many 'traditional' crimes have taken a new turn with the advent of the internet, such as crimes against children, financial crimes and even terrorism.

In the past, cybercrime was committed mainly by individuals or small groups. Today, the authorities are seeing highly complex cybercriminal networks bring together individuals from across the globe in real time to commit crimes on an unprecedented scale. New trends in cybercrime are emerging all the time, with estimated costs to the global economy running to billions of dollars.

Among the various forms of cybercrime are malware attacks, encompassing viruses, worms, ransomware and spyware, designed to disrupt, damage, or gain unauthorised access to computer systems. Phishing involves the deceptive use of emails, messages or websites to trick individuals into disclosing sensitive information. Identity theft sees cybercriminals stealing personal data to impersonate individuals for financial fraud or other criminal purposes. Distributed Denial of Service (DDoS) attacks overload targets with traffic, rendering networks or websites temporarily or permanently unavailable. Cyber espionage involves state-sponsored or corporate-driven efforts to steal sensitive information, intellectual property or trade secrets for political, economic or competitive advantage. Cybersecurity, therefore, becomes important to consider.

Cybersecurity is a proactive approach aimed at safeguarding digital systems, networks and data from cyber threats. This comprehensive strategy involves diverse measures, technologies, and best practices to prevent unauthorised access, mitigate risks, and respond efficiently to incidents. For example, network security employs tools such as firewalls, intrusion detection/prevention systems, and secure protocols to defend against unauthorised access and cyberattacks. Endpoint security focuses on securing individual devices through measures like antivirus software, encryption and secure configurations. Also, access control and authentication enforce strict controls and identity management to ensure only authorised individuals access systems and data. Other forms of cybersecurity include encryption technologies used to protect sensitive data during transit and at rest, rendering it unreadable to unauthorised users.

In addition, security awareness training is crucial for educating individuals within organisations about cybersecurity best practices, reducing the risk of falling victim to social engineering or other cyber threats.

3. Market Abuse (including Insider Dealing)

3.1 Market Abuse

Learning Objective

8.3.1 Know the offences that constitute market abuse including insider dealing, unlawful dissemination of inside information, manipulating market transactions and misleading statements information

When directors or employees of a listed company buy or sell shares in that company, there is a possibility that they are committing a criminal act – **insider dealing**.

For example, a director may be buying shares in the knowledge that the company's last six months of trade was better than the market expected before this information is made public. The director has the benefit of this information because they are 'inside' the company. In nearly all markets, this would be a criminal offence, punishable by a fine and/or a jail term.

To find someone guilty of insider dealing, it is necessary to define who is deemed to be an insider, what is deemed to be inside information and the situations that give rise to the offence.

Inside information is information that relates to particular securities or a particular issuer of securities (and not to securities or securities issuers generally) and:

- is specific or precise
- has not been made public, and
- if it were made public, would be likely to have a significant effect on the price of the securities.

This is generally referred to as unpublished price-sensitive information, and the securities are referred to as price-affected securities. The information becomes public when it is published.

Information can be treated as public even though it may be acquired by persons only exercising diligence or expertise (for example, by careful analysis of published accounts, or by scouring a library). A person has price-sensitive information as an insider if they know that it is inside information from an inside source. The person may have:

1. gained the information through being a director, employee or shareholder of an issuer of securities
2. gained access to the information by virtue of their employment, office or profession (for example, the auditors to the company), or
3. sourced the information from (1) or (2), either directly or indirectly.

Insider trading takes place when an insider acquires, or disposes of, price-affected securities while in possession of unpublished price-sensitive information. It also occurs if they encourage another person to deal in price-affected securities, or to disclose the information to another person (other than in the proper performance of employment).

The instruments covered by the insider trading rules are usually broadly described as 'securities', which include:

- shares
- bonds (issued by a company or a public sector body)
- warrants
- depositary receipts
- options (to acquire or dispose of securities)
- futures (to acquire or dispose of securities), and
- contracts for difference (based on securities, interest rates or share indices).

Note that the definition of securities does not normally embrace commodities and derivatives on commodities (such as options and futures on agricultural products, metals or energy products), or units/shares in open-ended collective investment schemes.

3.2 Market Abuse

Market abuse may arise in circumstances where financial investors have been unreasonably disadvantaged, directly or indirectly, by others who behave unlawfully. Certain types of behaviour, such as insider dealing and market manipulation, can amount to market abuse.

Market abuse is a civil offence and can be subject to fines and sanctions by the regulator. Insider dealing and market manipulation may also be a criminal offence and offences are prosecuted in the courts.

As an example, UK and European regulation specifically prohibits three types of behaviour that may lead to market abuse, subject to certain exemptions, as shown below.

Insider dealing	• Insider dealing arises when a person in possession of inside information uses it to deal, to attempt to deal, or to recommend or induce another to do so. • Dealing includes acquiring or disposing of financial instruments to which the inside information relates, as well as to cancelling or amending an order that was made before having inside information in relation to that instrument. • A person using the recommendation or inducement will also be insider dealing where they know, or ought to know, that the recommendation or inducement is based on inside information. • In the UK, the regulator judges what a reasonable person knows, or ought to know, in such circumstances.
Public disclosure requirements	• The general disclosure obligation requires issuers to inform the public as soon as possible about inside information which directly concerns them. Where their securities are admitted to trading on a regulated market, disclosure must also be made to the officially appointed central storage mechanism. • There is an obligation to prepare and maintain insider lists of any person with access to inside information. • Directors and senior executives (and their closely associated persons) who have regular access to inside information must notify both the issuer and the regulator of every account transaction relating to the issuer's shares, debt instruments, derivatives or other linked financial instruments.

Market manipulation	• Market manipulation is committed if a person carries out specified activities or behaviours which include:
	  • giving false or misleading signals about the supply of, demand for or price of a financial instrument
	  • using fictitious devices or other deception or contrivance that is likely to affect the price of financial instruments
	  • disseminating information which gives, or is likely to give, false or misleading signals as to supply, demand or price of financial instruments; or secures, or is likely to secure, their price at an abnormal or artificial level, including circulating rumours knowing the information was false or misleading, or
	  • certain other behaviours including collaborating to secure a dominant position over the supply or demand for a financial instrument, or creating other unfair trading conditions, including by algorithmic and high-frequency trading (HFT).

4. Integrity and Ethics in Professional Practice

Learning Objective

8.1.4 Understand the key principles of professional integrity and ethical behaviour in financial services

We are all faced with ethical choices on a regular basis, and doing the right thing is usually obvious. Yet there have been many situations in the news over the years in which seemingly rational people have behaved unethically.

Despite the relationship between the two, ethics should not be seen as a subset of regulation, but as an important topic in its own right.

Many firms and individuals maintain the highest standards without feeling the need for a plethora of formal policies and procedures documenting conformity with accepted ethical standards. Nevertheless, it cannot be assumed that ethical awareness will be absorbed through a process of osmosis. Accordingly, if we are to achieve the highest standards of ethical behaviour in our industry, and in industry more generally, it is sensible to consider how we can create a sense of ethical awareness.

If we accept that ethics is about both thinking and doing the right thing, then we should seek first of all to instil the type of thinking which causes us, as a matter of habit, to reflect upon what we are considering doing, or what we may be asked to do, before we carry it out.

There will often be situations, particularly at work, when we are faced with a decision, when it is not immediately obvious whether what we are being asked to do is actually right.

A simple checklist will help to decide. Is it:

- **Open** – is everyone whom your action or decision affects fully aware of it, or will they be made aware of it?
- **Honest** – does it comply with applicable law or regulation?
- **Transparent** – is it clear to all parties involved what is happening/will happen?
- **Fair** – is the transaction or decision fair to everyone involved in it or affected by it?

A simple and often quoted test is whether you would be happy to appear in the media in connection with, or in justification of, the transaction or decision.

4.1 Codes of Ethics, Codes of Conduct, and Regulation

Learning Objective

8.1.3 Know the Chartered Institute for Securities & Investment (CISI) Code of Conduct

For any industry in which trust is a central feature, demonstrable standards of practice and the means to enforce them are a key requirement. Hence the proliferation of professional bodies in the fields of health and wealth – areas in which consumers are more sensitive to performance and have higher expectations than in many other fields.

Within financial services, we have a structure where, in most countries, detailed and prescriptive regulation is imposed by regulatory bodies (see section 1.2).

Nevertheless, professional bodies operating in the field of financial services have developed codes of conduct for their members, and the following table indicates the areas of responsibility that a sample of these cover.

The Chartered Institute for Securities & Investment (CISI) already has in place its own code of conduct. Membership of the CISI requires members to meet the standards set out within the Institute's principles.

These words are from the introduction:

> *'Professionals within the securities and investment industry owe important duties to their clients, the market, the industry and society at large. Where these duties are set out in law, or in regulation, the professional must always comply with the requirements in an open and transparent manner.*
>
> *Membership of the Chartered Institute for Securities & Investment requires members to meet the standards set out within the Institute's Principles. These Principles impose an obligation on members to act in a way beyond mere compliance.'*

They set out clearly the expectations upon members of the industry *'to act in a way beyond mere compliance'*. In other words, we must understand the obligation upon us to act with integrity in all aspects of our work and our professional relationships.

Principles	Stakeholders
Personal Accountability – to strive to uphold the highest levels of personal and professional standards at all times, acting with integrity, honesty, due skill, care and diligence to avoid any acts, either in person, in a remote working environment or digitally which may damage the reputation of your organisation, your professional body or the financial services profession.	Self, Clients, Regulators, Colleagues, Market Participants, Firm, Profession, Society
Client Focus – to put the interests of clients and customers first by treating them fairly, being a good steward of their interests, never seeking personal advantage from confidential information received and utilising client data only for a defined purpose.	Clients
Conflict of Interest – being alert to and actively manage fairly and effectively any personal or other conflicts of interest, obeying legislation and complying with regulations to the best of your ability, ensuring you are open and cooperative with all your regulators, challenging and reporting unlawful or unethical behaviour.	Clients, Market Participants, Regulators
Respect for Market Participants – to treat all counterparties and business partners with respect, to observe proper standards of market integrity, good practice, conduct and confidentiality required to maintain the highest level of mutual trust.	Clients, Market Participants
Professional Development – to strive continually for professional excellence, committing to continuous professional development (CPD) and promoting and supporting the development of others.	Profession, Clients, Colleagues
Aware of Capabilities – to decline to act on any matter about which you are not competent or qualified unless you have access to such advice or assistance to carry out the work in a professional manner, taking into account the nature of the individual mandates given by your customers and counterparties.	Clients, Profession, Market Participants
Respect Others and the Environment – to treat everyone fairly and with respect, supporting opportunity for all, embracing diversity and inclusion and ensuring that the environmental impact of your work is considered.	Society, Colleagues, Clients, Regulators, Market Participants, Profession, Professional Body
Speak Up & Listen Up – to be active in speaking up and encouraging others to do so by listening up, promoting a safe environment for all and recognising the responsibilities you have to the communities in which you operate.	Society, Colleagues

End of Chapter Questions

Think of an answer for each question and refer to the appropriate section for confirmation.

1. **What was the International Organization for Securities Commissions (IOSCO) set up to facilitate?**
   Answer Reference: Section 1.1

2. **What are the general objectives and benefits of financial regulations?**
   Answer Reference: Section 1.1

3. **List three common aims of financial services regulators globally.**
   Answer Reference: Section 1.2

4. **What are some examples of the forms that money laundering can take?**
   Answer Reference: Section 2.1

5. **What are the three stages of money laundering?**
   Answer Reference: Section 2.1.1

6. **What are the two major differences between terrorist financing and money laundering?**
   Answer Reference: Section 2.1.2

7. **What is meant by cybersecurity?**
   Answer Reference: Section 2.2

8. **What is meant by the term 'inside information'?**
   Answer Reference: Section 3.1

9. **What types of securities do the insider dealing rules apply to?**
   Answer Reference: Section 3.1

10. **What types of behaviour might lead to a charge of market abuse?**
    Answer Reference: Section 3.2

Chapter Nine

Other Financial Products

1. **Pensions** 179
2. **Loans** 181
3. **Mortgages** 185
4. **Life Assurance** 191

This syllabus area will provide approximately 4 of the 50 examination questions

1. Pensions

Learning Objective

9.1.1 Know the benefits provided by pensions

9.1.2 Know the basic features and risk characteristics of retirement funds: state schemes; corporate retirement plans (defined benefit; defined contribution); personal schemes

1.1 Introduction

For many, the need to invest is to provide a means of income for the long term after they stop working. Their retirement fund and their home represent their main assets.

A pension is an investment fund where contributions are made, usually throughout the individual's working life, to provide a lump sum on retirement plus an annual pension payable thereafter. In many countries, pension contributions are generally tax efficient – they reduce the amount of an individual's taxable income and, therefore, the amount of income tax paid. These tax advantages are put in place by the government to encourage people to provide for their old age. The pensions themselves tend to be subject to income tax when they are received.

1.2 State Pension Schemes

A state pension is provided in many countries to provide people in retirement with the funds to live.

The provision will obviously vary from country to country, but one of the common features in many countries is that state pensions are provided out of a government's current year income, with no investment for future needs.

This is a problem in many countries, since people are living longer in retirement, which presents serious funding issues for governments. In the UK,

for example, the dependency ratio (typically, the proportion of working people compared to those not in the labour force, such as retired people) is forecast to be 3:1 by 2030 and 2.5:1 by 2050. This means that by 2050, either each worker will have to support almost twice as many retired people, or support per head will need to fall substantially, or some combination of these changes.

Developing economies such as India, however, have relatively low dependency ratios due to their relatively young populations. The challenge instead will be how to create an inclusive, affordable and fair pension system and how people provide for their retirement in future as wealth and living standards improve.

1.3 Corporate Pension Schemes

One of the earliest kinds of scheme supplementing state funding was the occupational pension scheme. Corporate retirement schemes or occupational pension schemes are run by companies for their employees.

The advantages of these schemes are:

- Employers contribute to the fund (some pension schemes do not involve any contributions from the employee – these are called non-contributory schemes).
- Running costs are often lower than for personal schemes and the costs are often met by the employer.
- The employer must ensure the fund is well-run and, for defined benefit (DB) schemes, must make up any shortfall in funding.

In an occupational pension scheme, the employer makes pension contributions on behalf of its workers. For example, an occupational pension scheme might provide an employee with 1/40th or 1/60th of their final salary for every year of service. The employee could then retire with an annual pension the size of which was related to the number of years' service and the salary earned. This type of occupational pension scheme is known as a final salary scheme or DB scheme. Many private sector employers have stopped providing such occupational schemes to new employees because of rising life expectancies and volatile investment returns and the implications these factors have on their funding of these schemes.

Instead, occupational pension schemes are now typically provided to new employees on a defined contribution (DC) basis – where the size of the pension is driven by the contributions paid and the investment performance of the fund. Under this type of scheme, an investment fund is built up and the amount of pension that will be received at retirement will be determined by the value of the fund and the amount of pension it can generate.

The higher cost and risk of providing a DB scheme are a part of the reason why many companies have closed their DB schemes to new joiners and make only DC schemes available to staff. For employers, a key attraction of DC schemes over DB schemes is that the liability of future pension provision (and any shortfall) does not reside on the employer's balance sheet; it is the employee who would end up with a smaller pension.

1.4 Personal Pensions

Private pensions or personal pensions are individual pension plans. They are DC schemes that might be used by employees of companies that do not run their own scheme, or they might be used in addition to an existing pension scheme, and by the self-employed.

Many employers actually organise personal pension schemes for their employees by arranging the administration of these schemes with an insurance company or an asset management firm. Such employers may also contribute to the personal pension schemes of their employees.

Individuals and the self-employed who wish to provide for their pension and do not have access to occupational schemes or employer-arranged personal pensions, or have a gap in their pension due to job changes and career breaks, have to organise their own personal pension schemes. These will often be arranged through an insurance company or an asset manager, where the individual can choose from the variety of investment funds offered.

In a private scheme, the key responsibility that lies with the individual is that the individual chooses the investment fund or direct holdings in a scheme administered by an insurance company or asset manager. It is then up to the individual to monitor the performance of their investments and assess whether it will be sufficient for their retirement needs.

1.4.1 Individual Retirement Accounts (IRAs)

Individual retirement accounts (IRAs) are found in the US and are effectively a type of personal pension scheme. They are established by individual taxpayers, and contributions can be made up to a maximum amount which can qualify for tax deduction. Contributions to a traditional IRA may be tax-deductible depending on the taxpayer's income, tax filing status and coverage by an employer-sponsored retirement plan.

2. Loans

Learning Objective

9.2.1 Know the differences between bank loans, overdrafts and credit card borrowing

9.2.4 Know the difference between secured and unsecured borrowing

2.1 Types of Borrowing

Individuals can borrow money from banks and other financial institutions in three main ways:

- overdrafts
- credit card borrowing, and
- loans.

2.1.1 Overdrafts

When an individual draws out more money than they hold in their bank account, they become overdrawn. Their account is described as being in overdraft.

If the amount overdrawn is within a limit previously agreed with the bank, the overdraft is said to be authorised. If it has not been previously agreed, or exceeds the agreed limit, it is unauthorised.

Unauthorised overdrafts are very expensive, usually incurring both a high rate of interest on the borrowed money, and a fee. The bank may refuse to honour cheques written on an unauthorised overdrawn account, which is commonly referred to as 'bouncing' cheques. In some countries, issuing cheques when there are insufficient funds in the account is a criminal offence.

Authorised overdrafts, agreed with the bank in advance, are charged interest at a lower rate. Some banks allow small overdrafts without charging fees to avoid infuriating a customer who might be overdrawn by a relatively low amount due to a mistiming between payments in and out.

Overdrafts are a convenient but expensive way of borrowing money, and borrowers should try to restrict their use to temporary periods, and avoid unauthorised overdrafts as far as possible.

2.1.2 Credit Card Borrowing

Individuals in the US and many other countries are very attached to their credit cards from banks and financial institutions, and other cards from retail stores, known as store cards. In other countries, including much of Europe, the use is much less widespread.

A wide variety of retail goods, such as food, electrical goods, petrol and cinema tickets, can be paid for using a credit card. The retailer is paid by the credit card company for the goods sold; the credit card company charges the retailer a small fee, but it enables the store to sell goods to customers using their credit cards avoiding the need to maintain large cash balances in store.

Customers are, typically, sent a monthly statement by the credit card company. Customers can then choose to pay all the money owed to the credit card company, or just a percentage of the total sum owed. Interest is charged on the balance owed by the customer.

Generally, the interest rate charged on credit cards is relatively high compared to other forms of borrowing, including overdrafts. However, if a credit card customer pays the full balance each month, they are borrowing interest-free. In order to attract new business, it is also common for credit card companies to offer 0% interest to new customers for balances transferred from other cards and for new purchases for a set period, often six months.

2.1.3 Loans

Loans can be subdivided into two groups: secured or unsecured.

Unsecured loans are typically used to purchase consumer goods. The lender will check the creditworthiness of the borrower by assessing whether they can afford to repay the loan and interest over the agreed term of, say, 48 months from their income, given their existing outgoings.

The unsecured loan is not linked to the item that is purchased with the loan (in contrast to mortgages which are covered in section 3), so if the borrower defaults it can be difficult for the lender to enforce repayment. The usual mechanism for the unsecured lender to enforce repayment is to start legal proceedings to get the money back.

Example

Jerry borrows US$10,000, unsecured over a 36-month period, to buy a new kitchen. After three months, Jerry loses his job and is unable to continue to meet the repayments and interest. Because the loan is unsecured, the lender is not able to take the kitchen to recoup the money. The lender can simply negotiate with Jerry to reschedule the repayments or commence legal proceedings to reclaim the money owed.

It is common for loans made to buy property to be secured. Such loans are referred to as mortgages, and the security provided to the lender means that the rate of interest is likely to be lower than on other forms of borrowing, such as overdrafts and unsecured loans. If secured loans are not repaid, the lender can repossess the specific property which was the security for the loan.

Example

Jenny borrows US$500,000 to buy a house. The loan is secured on the property. Jenny loses her job and is unable to continue to meet the repayments and interest. Because the loan is secured, the lender is able to take the house to recoup the money. If the lender takes this route, the house will be sold and the lender will take the amount owed and give the rest, if any, to Jenny.

For more detail on mortgages, see section 3.

2.2 Interest Rates

Learning Objective

9.2.2 Know the difference between the quoted interest rate on borrowing and the effective annual rate of borrowing

9.2.3 Be able to calculate the effective annual rate of borrowing, given the quoted interest rate and frequency of payment

---

As seen in section 2.1.3, the costs of borrowing vary depending on the form of borrowing, how long the money is required for, the security offered and the amount borrowed.

Mortgages, secured on a house, are much cheaper than credit cards and agreed overdrafts.

Unauthorised overdrafts are incredibly expensive and can be thought of as a fine that the bank charges for not keeping it fully informed of spending excesses.

Borrowers also have to grapple with the different rates quoted by lenders – loan companies traditionally quote flat rates that are lower than the true rate or effective annual rate (EAR).

Example

The Moneybags Credit Card Company might quote their interest rate at 12% pa, charged on a quarterly basis.

The EAR can be determined by taking the quoted rate and dividing by four (to represent the quarterly charge). It is this rate that is applied to the amount borrowed on a quarterly basis; 12% divided by 4 = 3%.

Imagine an individual borrows US$100 on their Moneybags credit card. Assuming they make no repayments for a year, how much will be owed?

At the end of the first quarter US$100 x 3% = US$3 will be added to the balance outstanding, to make it US$103.

At the end of the second quarter, interest will be due on both the original borrowing and the interest. In other words, there will be interest charged on the first quarter's interest of US$3, as well as the US$100 original borrowing: US$103 x 3% = US$3.09 will be added to make the outstanding balance US$106.09.

At the end of the third quarter, interest will be charged at 3% on the amount outstanding (including the first and second quarters' interest). US$106.09 x 3% = US$3.18 will be added to make the outstanding balance US$109.27.

At the end of the fourth quarter, interest will be charged at 3% on the amount outstanding (including the first, second and third quarters' interest). US$109.27 x 3% = US$3.28 will be added to make the outstanding balance US$112.55.

In total the interest incurred on the US$100 was US$12.55 over the year. This is an EAR of 12.55 ÷ 100 x 100 = 12.55%.

There is a shortcut method to arrive at the effective annual rate seen above. It is simply to take the quoted rate, divide by the appropriate frequency (four for quarterly, two for half-yearly, 12 for monthly), and express the result as a decimal – in other words, 3% will be expressed as 0.03, or 6% as 0.06.

The decimal is then added to 1 and multiplied by itself by the appropriate frequency. The result minus 1, and multiplied by 100 to convert it back into a decimal, is the EAR.

From the example above:

- 12% divided by 4 = 3%, expressed as 0.03
- 1 + 0.03 = 1.03
- 1.03^4 = 1.03 x 1.03 x 1.03 x 1.03 = 1.1255
- 1.1255 – 1 = 0.1255 x 100 = 12.55%

This formula can also be applied to deposits to determine the EAR of a deposit paying interest at regular intervals.

To make comparisons easier, lenders must quote the true cost of borrowing, embracing the EAR and including any fees that are required to be paid by the borrower. This is known as the annual percentage rate (APR). The additional fees that the lender adds to the cost of borrowing might be, for example, loan arrangement fees. However, it should be noted that the terms used to describe the EAR may differ globally. The APR will vary between lenders, all of whom have to advise customers as to what their APR is before agreements are signed.

3. Mortgages

Learning Objective

9.3.1 Understand the characteristics of the mortgage market: interest rates; loan to value

9.3.2 Know the definition of and types of mortgage: repayment; interest only; offset

3.1 Characteristics of the Property Market and Mortgages

A mortgage is simply a secured loan, with the security taking the form of a property.

A mortgage is typically provided to finance the purchase of a property. For most people, their main form of borrowing is their mortgage on their house or flat. Mortgages tend to be over a longer term than unsecured loans, with most mortgages running for 20 or 25 years.

As well as buying your home, some of the more wealthy might take out additional mortgages to buy holiday homes. Others might take out a 'buy-to-let' mortgage loan with a view to letting the property out to tenants.

Because of the performance of property prices in many parts of the world over the last 30–40 years, property is seen as a reasonably safe investment that should provide reasonable returns as long as it is held for a considerable time. There is also potentially an additional attraction that any capital gains made on your home (often described as your 'principal private residence' by the tax authorities) are commonly not subject to any capital taxes, such as **capital gains tax (CGT)**.

However, the costs of purchasing a property are substantial, including professional fees paid to a lawyer and a building surveyor. Each individual property is also unique, and the attractiveness or otherwise is driven heavily by personal preference. As has been seen recently, property market falls, or even crashes, are also not unknown or inconceivable, so investors should not assume that property will outperform other investments indefinitely.

Whether a mortgage is to buy a house or flat to live in, or to 'buy-to-let', the factors considered by the lender are much the same. The mortgage lender, such as a bank, will consider each application for a loan in terms of the credit risk – the risk of not being repaid the principal sum loaned and the interest due.

Applicants are assessed in terms of:

- income and security of employment
- existing outgoings – such as utility bills, other household expenses and school fees, and
- the size of the loan in relation to the value of the property being purchased and the applicant's income. This is referred to as the loan-to-value ratio or the loan-to-earnings ratio.

For 'buy-to-let' mortgages, the lender will also consider the projected income on the property.

A second mortgage is sometimes taken out on a single property. If the borrower defaults on their borrowings, the first mortgage ranks ahead of the second one in terms of being repaid out of the proceeds of the property sale.

3.2 Types of Mortgages

3.2.1 Repayment Mortgages

The most straightforward form of mortgage is a repayment mortgage. This is simply when the borrower makes monthly payments to the lender, with each monthly payment comprising both interest and capital.

Example

Mr Mullergee borrows US$100,000 from XYZ Bank to finance the purchase of a flat on a repayment basis over 25 years. Each month he is required to pay US$600 to XYZ Bank. Mr Mullergee will pay a total of US$180,000 (US$600 x 12 months x 25 years) to XYZ Bank, including US$80,000 interest over and above the capital borrowed of US$100,000. Each payment he makes will be partly allocated to interest and partly allocated to capital. In the early years, the payments are predominantly interest. Towards the middle of the term, the capital begins to reduce significantly, and at the end of the mortgage term the payments are predominantly capital.

The key advantage of a repayment mortgage over other forms of mortgage is that, as long as the borrower meets the repayments each month, they are guaranteed to pay off the loan over the term of the mortgage. The main risks attached to a repayment mortgage from the borrower's perspective are:

- The cost of servicing the loan could increase, since most repayment mortgages charge interest at the lender's standard variable rate of interest. This rate of interest will increase if interest rates go up.
- The borrower runs the risk of having the property repossessed if they fail to meet the repayments – remember, the mortgage loan is secured on the underlying property.

3.2.2 Interest-Only Mortgages

As the name suggests, an interest-only mortgage requires the borrower to make interest payments to the lender throughout the period of the loan. At the same time, the borrower generally puts money aside each month into some form of investment.

The borrower's aim is for the investment to grow through regular contributions and investment returns, such as dividends, interest and capital growth, so that at the end of the mortgage, the accumulated investment is sufficient to pay back the capital borrowed and perhaps offer some additional cash.

Example

Ms Ward borrows £100,000 from XYZ Bank to finance the purchase of a flat on an interest-only basis over 25 years. Each month she is required to pay £420 interest to XYZ Bank. At the same time, Ms Ward pays £180 each month into an investment fund run by an insurance company. At the end of the 25-year period, Ms Ward hopes that the investment in the fund will have grown sufficiently to repay the £100,000 loan from XYZ Bank and offer an additional lump sum.

The main risks attached to an interest-only mortgage from the borrower's perspective are:

- borrowers with interest-only mortgages still face the risks that repayment mortgage borrowers face – namely, that interest rates may increase and their property is at risk if they fail to keep up the payments to the lender, and
- an additional risk that the investment might not grow sufficiently to pay the amount owing on the mortgage. In the example above, there is nothing guaranteeing that, at the end of the 25-year term, the investment in the fund will be worth £100,000 – indeed, it might be worth considerably less.

Lenders must ensure that borrowers have robust investment plans in place to repay the mortgage.

3.2.3 Offset Mortgages

An offset mortgage is a simple concept which works on the basis that, for the calculation and charging of interest, any mortgage is offset against, for example, any savings you may hold.

Example

Let us assume you have a mortgage of £100,000 and have a savings account with £8,000 and £2,000 in a current account. For the purpose of calculating interest, the £100,000 is offset by the £10,000 worth of savings, so in effect you only pay interest on £90,000 of your mortgage borrowing.

Obviously, you would not receive any interest on your savings.

There are two main benefits to this approach:

- A higher-rate taxpayer will not incur tax on any savings interest earned because it has been offset against the mortgage borrowing.
- As interest is being paid on a slightly lower mortgage, it provides some flexibility to manage finances, pay off the mortgage a little quicker and have more control.

3.3 Payment Terms

There are four main methods by which the interest on a mortgage may be charged:

- variable rate
- fixed rate
- capped rate, and
- discounted rate.

Variable Rate Mortgages	• In a variable rate mortgage, the borrower pays interest at a rate that varies with prevailing interest rates. • Once they have entered into a variable rate mortgage, the borrower will benefit from rates falling and remaining low, but will suffer the additional costs when rates increase. The interest rate charged may also track the movement in the official base rate of the central bank, when it is sometimes known as a 'tracker' mortgage.
Fixed Rate Mortgages	• In a fixed rate mortgage, the borrower's interest rate is set for an initial period, such as the first three or five years. • If interest rates rise, the borrower is protected from the higher rates throughout this period, continuing to pay the lower, fixed, rate of interest. However, if rates fall and perhaps stay low, the fixed rate loan can only be cancelled if a redemption penalty is paid. The penalty is calculated to recoup the loss suffered by the lender as a result of the cancellation of the fixed rate loan. • It is common for fixed rate borrowers to be required to remain with the lender and pay interest at the lender's standard variable rate for a few years after the fixed rate deal ends – commonly referred to as a 'lock-in' period.
Capped Rate Mortgages	• Capped mortgages protect borrowers from rates rising above a particular rate – the 'capped rate'. • For example, a mortgage might be taken out at 6%, with the interest rate based on the lender's variable rate, but with a cap at 7%. If prevailing rates fall to 5%, the borrower pays at that rate, but if rates rise to 8% the rate paid cannot rise above the cap, and is only 7%.
Discounted Rate Mortgages	• Lending institutions often attract borrowers by offering discounted rate mortgages. A 6% loan might be discounted to 5% for the first three years. • Such deals might attract 'switchers' – borrowers who shop around and remortgage at a better rate. They may also be useful for first-time buyers as they make the transition to home ownership with a relatively low but growing level of income.

3.4 Islamic Finance

Learning Objective

9.3.3 Know the prohibition on interest and the types of mortgage contracts that exist in Islamic finance

Islamic finance is the approach used to determine what are acceptable investments and ways to raise capital under Shariah law.

A central element of Islamic finance is the importance of risk-sharing as part of raising capital and the avoidance of *riba* (usury) and *gharar* (risk or uncertainty). Charging or receiving interest is *haram*, which means prohibited, as it is considered usurious and exploitative. Financial products where details concerning the conditions of sale are unknown or uncertain are generally prohibited under Islamic law. Thus, all contracts should be devoid of unnecessary uncertainty and speculation, and parties must have perfect knowledge of the terms of exchange. In particular, the identification of the owner of the goods must usually be disclosed.

The absence of interest in Islamic finance is one of the key factors that differentiate Islamic banks from conventional banks. However, there are other important differences:

- Islamic banking is asset-backed, which means that an Islamic bank does not carry out business unless an asset is purchased to allow the transaction to be conducted according to Shariah law.
- The source of the Islamic bank's funding, profits and business investments cannot be in/from businesses that are considered unlawful under Shariah law, such as companies that deal in interest, gambling, pornography, speculation, tobacco and other commodities contrary to Islamic values.
- The whole premise of Islamic banking is to provide a way for society to conduct its finances in a way that is ethical and socially responsible. Trade, entrepreneurship and risk-sharing are encouraged, and these are the financial principles that underpin Islamic finance and the products offered by Islamic banks.

When it comes to mortgages, unlike a conventional mortgage where the purchaser borrows money from a lender which is then repaid with interest, home purchase plans offered by Islamic banks use structures that are deemed Shariah compliant by a separate independent body, the Shariah Supervisory Committee (SSC) made up of Islamic scholars and experts in the interpretation of Islamic law and its application within modern-day Islamic financial institutions. The type of mortgage offered will depend on the method selected by the Islamic finance institution, competition and what is most acceptable to their customer base.

In the UK, for example, compliant Islamic mortgage alternatives are based upon the Islamic finance principles of a co-ownership (diminishing *Musharaka*) and leasing (*Ijara*). In Dubai, Islamic banks offer a range of options including:

- ***Murabaha*** – where the bank buys the property but then sells it on to the customer at a higher price. The buyer repays the higher figure in a series of instalments, typically over a 15-year period. Since only the capital is being repaid, there is no interest.
- ***Ijara*** – where the bank leases the property in return for a rental payment for a specified financing period. The bank promises to transfer the title of the property at the end of the financing period, if all payments have been made.

Example

In the UK, a home purchase plan (HPP) may be based on joint ownership and lease agreements arranged using two separate principles of Islamic finance:

- With an HPP of, say, 20 years, the bank and the customer purchase the property jointly. The customer then has 20 years to buy the bank's share for the same initial purchase price. This is based on the diminishing Musharaka (diminishing partnership) principle of Islamic finance.
- At the time of completing the joint purchase, the customer will live in the property even though a large share of it is owned by the bank. Therefore, until the customer becomes the full owner, they will lease the portion of the property still owned by the bank and pay a monthly rental to the bank. This is based on the Islamic financing principles of Ijara (leasing).
- When all acquisition payments have been made and the finance has been settled, ownership of the property transfers fully to the customer and they now own their home outright, without having paid any interest.

Islamic finance extends, of course, well beyond just mortgages, and is one of the fastest-growing financial areas.

4. Life Assurance

Life assurance and protection policies are designed and sold by the insurance industry to provide individuals with some financial protection in case certain events occur. Although product details may vary from country to country, the general principles of what the individual (and their adviser) should be looking for in the products and their main features tend to be consistent.

4.1 Basic Principles of Life Assurance

Learning Objective

9.4.1 Know the basic principles of life assurance and the definition of the following types of life policy: term assurance; whole-of-life

A life policy is simply an insurance policy where the event insured is a death. Such policies involve the payment of premiums in exchange for life cover – a lump sum that is payable upon death.

Instead of paying a fixed sum on death, there are investment-based policies which may pay a sum calculated as a guaranteed amount plus any profits made during the period between the policy being taken out and the death of the insured. The total paid out, therefore, depends on the guaranteed sum, the date of death and the investment performance of the fund.

There are two types of life cover we need to consider, namely whole-of-life assurance and term assurance. A whole-of-life policy provides permanent cover, meaning that the sum assured will be paid whenever death occurs, as opposed to if death occurs within the term of a term assurance policy.

4.1.1 Whole-of-Life Assurance

There are three types of whole-of-life policy:

- **non-profit** that is for a guaranteed sum only
- **with-profits** which pays a guaranteed amount plus any profits made during the period between the policy being taken out and death, and
- **unit-linked policies** where the return will be directly related to the investment performance of the units in the insurance company's fund.

The reason for such policies being taken out is not normally just for the insured sum itself. Usually, they are bought as part of a protection planning exercise, to provide a lump sum in the event of death to pay off the principal in a mortgage or to provide funds to assist with the payment of any tax that might become payable on death. They can serve two purposes, therefore, both protection and investment.

4.1.2 Term Assurance

Term assurance is a type of policy that pays out a lump sum in the event of death or serious illness occurring within a specified period.

Term assurance has a variety of uses, such as ensuring there are funds available to repay a mortgage in case someone dies or providing a lump sum that can be used to generate income for a surviving partner or to provide funds to pay any tax that might become payable on death.

When taking out life cover, the individual selects the amount that they wish to be paid out if the event happens and the period that they want the cover to run for. If, during the period when the cover is in place, they die, then a lump sum will be paid out that equals the amount of life cover selected. With some policies, if an individual is diagnosed as suffering from a terminal illness which is expected to cause death within 12 months of the diagnosis, then the lump sum is payable at that point.

End of Chapter Questions

Think of an answer for each question and refer to the appropriate section for confirmation.

1. **What is the biggest challenge facing state pensions around the world?**
   Answer Reference: Section 1.1

2. **What is the difference between a defined benefit (DB) pension scheme and a defined contribution (DC) pension scheme?**
   Answer Reference: Section 1.3

3. **How can the interest rates on different types of loans or accounts be readily compared?**
   Answer Reference: Section 2.2

4. **Firm A charges interest annually at 6% pa on loans and Firm B charges interest quarterly at 6% pa. Which is more expensive?**
   Answer Reference: Section 2.2

5. **Your firm offers fixed rate loans at 6% pa charged quarterly. Ignoring charges, what is the annual percentage rate (APR) on the loan?**
   Answer Reference: Section 2.2

6. **What is meant by a repayment mortgage and what are its advantages?**
   Answer Reference: Section 3.2.1

7. **What are the main risks associated with an interest-only mortgage?**
   Answer Reference: Section 3.2.2

8. **What are the main differences between the different ways in which interest is calculated on mortgages?**
   Answer Reference: Section 3.3

9. **In Islamic finance, what is the difference between *Murabaha* and *Ijara*?**
   Answer Reference: Section 3.4

10. **What are the key differences between non-profit, with-profits and unit-linked policies?**
    Answer Reference: Section 4.1

Chapter Ten

Financial Advice

1. **Financial Advice** 199
2. **Legal Concepts in Financial Advice** 209
3. **The Financial Advice Process** 214

This syllabus area will provide approximately 3 of the 50 examination questions

1. Financial Advice

Learning Objective

10.1.1 Understand the main areas of financial advice: budgeting; protection; borrowing; investment and saving; later-life planning; estate planning; tax planning and offshore considerations

Having now covered markets, assets, funds and other financial products, it leaves one vital component to cover – advice. Financial advice is the help given to an individual when a financial adviser considers their financial needs and recommends products to meet them. A financial adviser can give advice about an individual's finances as a whole, or about one particular need that they have.

Receiving financial advice often entails having a face-to-face interview with an adviser, although it can be received in other ways. In all cases, the adviser should gather information about the individual to find out their specific needs and circumstances. The adviser can then use this information to recommend that they buy particular products; however, they must only recommend products that are suitable for the individual.

1.1 Budgeting

Taking the time to manage your money better can really pay off as it can help you to stay on top of bills and save money each year. Budgeting means an individual is:

- less likely to end up in debt
- less likely to be caught out by unexpected costs
- more likely to have a good credit rating
- more likely to be accepted for a mortgage or loan
- able to spot areas where they can make savings, and
- able to save for planned spending or just for the future.

The first step to taking control of finances is to produce a budget, recording areas of income and expenditure over a period of a year. If an individual is spending too much, it can help identify areas where they can cut back. It should also highlight the major areas of expenditure, such as a mortgage, where shopping around could reduce costs. Equally, it should highlight loans or money owed on credit cards where it usually makes sense to pay off the debt that charges the highest rate of interest first.

Hopefully, as a result, savings goals can then be set, initially creating an emergency reserve for unexpected bills and then, as savings grow, developing an investment plan or paying into a pension.

1.2 Borrowing

While few people can manage without borrowing, there are some steps that can be taken to keep it under control. Key questions to ask yourself include the following:

- Do you need to spend the money?
- Do you have other ways of financing the purchase?
- Can you afford to pay back the money that you are planning to borrow?

Before borrowing for a purpose, clients should consider whether it is worth getting into debt for this purpose. A good debt is one that is a sensible investment in a person's financial future. It should leave them better off in the long term, and it should not have a negative impact on their overall financial position. Bad debts are those that drain their wealth, are not affordable and offer no real prospect of 'paying for themselves' in the future.

If someone definitely wants to borrow some money and they are sure that they can repay it, there are a number of key factors to consider. It is very important to work out how much they can afford to repay each month, as this will affect which borrowing option is best for them. They should also make sure they choose the right type of credit or loan for their situation, otherwise they could find themselves paying more than they need to.

It is important to consider:

- the interest rate and the annual percentage rate (APR)
- how much will be repaid in total
- any penalties that may be incurred for missed or late payments, and
- the cost per week/month and whether this might vary.

1.3 Protection

Financial stability and protection should be considered at some level by all consumers. The protection required will, of course, depend on a number of circumstances including, for example, requirements and available income. There are four main areas that might be in need of protection – family and personal, mortgage, long-term care and business. To assess what type of protection is required involves the adviser exploring with the client what might happen and what the consequences might be. Although none of us can predict the future, it does not prevent us from considering future events and then assessing whether we are prepared for them. These areas are serviced by a wide range of protection products marketed by insurance companies. We will explore the characteristics of some of these products below.

1.3.1 Critical Illness Insurance Cover

Critical illness cover is designed to pay a lump sum in the event that a person suffers from any one of a wide range of critical illnesses. Looking at how many people suffer from a major illness before they reach 65, its use and value can readily be seen. Illness may force an individual to give up work and so could cause financial hardship. The cover provided by these types of policies is constantly changing as insurance companies develop their products further and policies adapt to changing medical diagnoses and claims experience. Some of the key features of such policies include the following:

- The critical illnesses covered will be clearly defined, eg, illness resulting from activities such as war or civil unrest will not be covered.
- Critical illness cover is usually available to those aged between 18 and 64 years of age and often must end before an individual's 70th birthday. It will pay out a lump sum if an individual is diagnosed with a critical illness and will normally be tax free. The cover will then cease.
- Critical illness cover can usually be taken out on a decreasing or increasing cover basis and can often be combined with other cover, such as life cover.

1.3.2 Income Protection Cover

Income protection insurance is designed to pay out an income benefit when a person is unable to work for a prolonged period due to sickness or incapacity. Since this may need to be paid for a significant period of time, the premiums are relatively expensive. Their use and value can be readily appreciated by considering how a family would continue to pay its bills if the main income earner were to fall ill. Some of the key features of such policies include the following:

- The circumstances under which a benefit will be payable are clearly defined. The illness or injury that an individual may suffer is referred to as 'incapacity', and the insurance policy will define what constitutes this in relation to their occupation.
- The policy provides a regular income after a certain waiting period called the 'deferred period' (the longer the deferred period chosen, the lower the premiums will be). The income will generally represent 50–75% of your pre-tax earnings considering state benefits and the fact that the income from the policy is not subject to tax. Payments will differ or cease on return to work.
- Once a claim is made, the insurance company may extend the deferred period or even decline the claim. The claim will not be met if incapacity arises as a result of specific situations including, for example, unreasonable failure to follow medical advice, alcohol or solvent abuse or intentional self-inflicted injury.

Income protection cover and critical illness insurance are complementary in the cover they offer. For most people, an element of each may be required, so some insurance companies offer a menu of products that offer a combination of covers under one policy.

1.3.3 Mortgage Payment Protection Cover

Mortgage payment protection is designed to ensure that the payments that are due for a mortgage continue to be paid if the borrower is unable to work because of accident, sickness or unemployment.

They tend to be available from the lending institution, as well as insurance companies, although costs need to be carefully compared. They are designed to cover short-term problems, such as covering the costs if an individual loses their job until they find alternative work, rather than to provide long-term benefits.

The same basic features as reviewed above under income protection cover will apply, along with the following further considerations:

- The protection provided will be on a level basis, so regular reviews are needed so that the cover reflects the payments due as mortgage interest rates fluctuate.
- The amount of benefit payable can be reduced to take account of income from other sources and there may be limits on the maximum amounts that will be paid. As a result, the amount of benefit paid may not cover the mortgage payments.

1.3.4 Accident and Sickness Cover

Personal accident policies are generally taken out for annual periods and can provide for income or lump sum payments in the event of an accident. Although they are relatively inexpensive, care needs to be taken to look in detail at the exclusions and limits that apply. These may include:

- the amount of cover may be the lower of a set amount or a maximum percentage of the individual's gross monthly salary, or
- the waiting period between when an individual becomes unable to work and when benefits start may be 30 or 60 days.

The insurance company will assess eligibility at the time of the claim and may refuse a claim as a result of pre-existing medical conditions, even if they have been disclosed.

1.3.5 Household Cover

House and contents insurance are well-established products and are well understood by consumers, so these will only be covered briefly.

Key considerations include the following:

- Is the cover enough to pay for the complete rebuild of a home?
- To what extent are external features of a house covered, such as walls, gates, drives and pathways?
- What cover is there in case a neighbour sues you for your tree falling on their property or a similar accident?
- What is the extent of cover for personal possessions?
- Is legal cover included?

1.3.6 Medical Insurance

Private medical insurance is obviously intended to cover the cost of medical and hospital expenses. It may be taken out by individuals, or provided as part of an individual's employment.

Some of the key features of such policies are:

- the costs that will be covered are usually closely defined
- there will be limits on what will be paid out per claim, or even over a period such as a year, or
- the standard care that can be dealt with by a person's local doctor may not be included.

Again, there will be exclusions, eg, for pre-existing conditions.

1.3.7 Long-Term Care

The purpose of long-term care cover is to provide the funds that will be needed in later life to meet the cost of care. Simply considering the cost of nursing home care explains the need for such a policy, but its value to an individual will depend on the amount of state funding for care costs that will be available. Premiums will be expensive, reflecting the cost of care, and the benefit will normally be paid as an income that can be used to cover the expenditure.

1.3.8 Business Insurance

Business insurance protection can take many forms and the two main types are liability insurance, such as public liability insurance, and indemnity insurance. Some examples of its use are:

- providing indemnity cover for claims against the business for faulty work or goods
- protecting loans that have been taken out and secured against an individual's assets
- providing an income if the owner is unable to work and the business ceases
- providing payments in the event of a key member of a business dying, to cover any impact on its profits, or
- providing money in the event of the death of a major shareholder or partner so that the remaining shareholders can buy out their share and their estate can distribute the funds to their family.

1.4 Investment and Saving

If someone saves regularly, they will quickly find that their savings will add up and keep growing. This is because each time any interest earned on money is paid into an account, it will start earning interest too. This interest on interest is known as compound interest, and over the longer term, it makes a significant difference to how much the savings are worth.

As an example, consider two separate investments of $1,000 that each earn 5% a year. In one, the earnings are withdrawn each year; therefore, the value of the investment remains the same, represented by the flat line in the graph below. In the other, the interest is reinvested each year, as shown by the curved upper line. As the reinvested earnings generate their own annual returns at 5%, the accumulated value accelerates toward the end of the 20-year and 40-year periods respectively.

We can define the term 'saving' as putting money aside without risk, and usually with the chance to earn interest. There is a wide choice of savings accounts available from banks and other financial institutions as seen in chapter 5. Key considerations when comparing returns on such accounts include the following:

- Advertised rates do not always represent the true rate actually earned.
- Tax treatment may vary.
- There may be minimum or maximum investment amounts which may restrict the usefulness of an account.
- Attractive accounts may only be available for funds that are new to that savings institution and not from existing accounts with the same firm.
- There may be penalty charges if withdrawals are made or early encashment is needed, which will reduce returns.
- High quoted returns may only last for a limited period, to be replaced by lower rates. Many top-of-the-table rates include temporary bonuses for three, six or 12 months, after which time the accounts often switch to uncompetitive rates.

Investing involves committing money into an investment vehicle, eg, a fund or a direct investment such as shares, in the hope of making a financial gain. It is different from saving because it involves a greater level of risk, and there is no guarantee that you will get your money back. Again, there is a wide range of investment products available, including individual accounts, unit trusts, shares and bonds.

Investment products are typically for the longer term and are generally suitable if the individual already has enough cash savings to keep them going for three to six months. Investments generally outperform cash savings over the longer term, but as their value can rise and fall, investors should be prepared to take on some risk.

1.5 Later-Life Planning

As covered in chapter 9, people are living longer than ever. Due to medical advances and general improvements in health, most people's life expectancy has increased significantly over the last few decades.

The bad news, however, is that to enjoy those extra years means needing a level of income that is enough to fund the life style that people want. Being able to enjoy rather than endure retirement requires individuals to plan and take action to achieve that objective.

Changing demographics and the increasing cost of state pension provision may see this source of retirement income decline and become, at best, modestly adequate. The increasing cost of providing state pensions is forcing the UK government to reassess how much they pay. Relying on the state to provide a comfortable retirement is, therefore, clearly not going to work. Existing pension plans may also fall short of providing the funds needed in retirement.

Earlier, we looked at compound interest rates and, using those, we can estimate how much needs to be built up for use as a retirement fund which will help quantify the impact of delay.

One simple way to estimate what size of retirement fund is needed is to determine what income needs to be generated to fund the life style that someone wants in retirement. We then need to estimate the return that this fund can generate.

Example

Let us assume that someone is aged 25 and wants to know the size of retirement fund that they need to build up for their retirement, which they expect to be at age 65. They estimate that they will need to be able to generate a pension income of $25,000 from their accumulated savings at today's prices. Then, they need to decide what rate of return it is reasonable for the fund to generate. For this example, we will assume that it can produce a return of 4% a year.

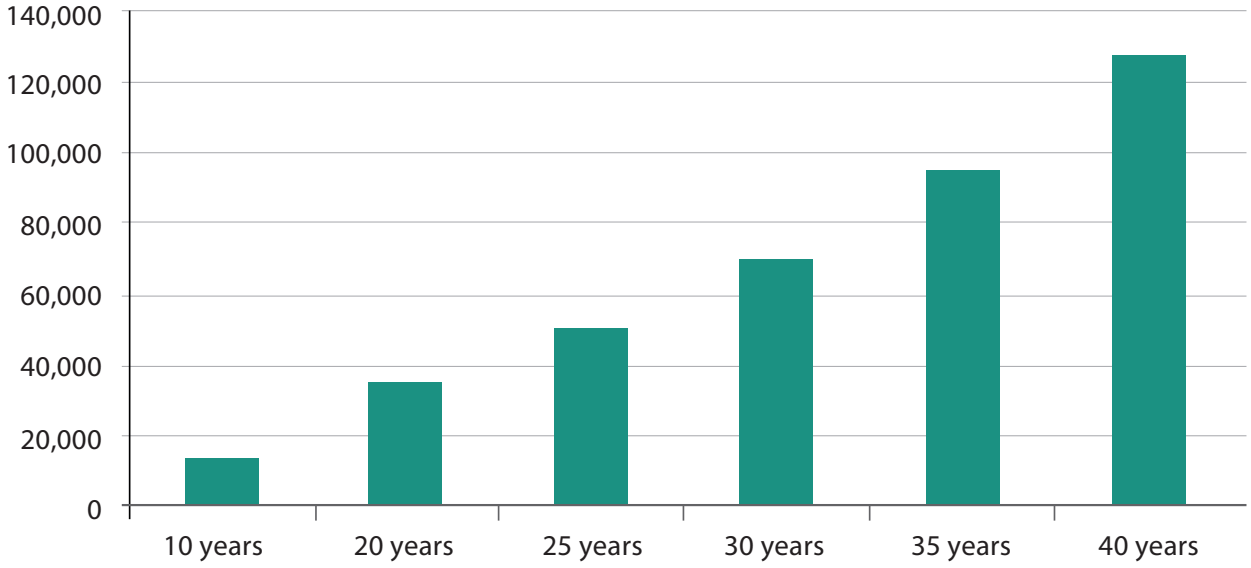
From this, we can get a simple idea of what size of fund needs to be built up. The income of $25,000 represents 4% of the retirement fund so the fund needed will be:

$$\$25,000 / 0.04 = \$625,000$$

This gives a simple idea of what sum needs to be saved. The next step is then to work out how much needs to be saved each year to try to achieve that goal.

The graph below shows the impact of saving $1,000 per year for different periods of time, assuming an average rate of return of 5%. If someone could begin saving early for retirement, and then save for 40 years, this would generate a fund of about $126,840. Going back to our example, this would imply needing to save an average of $5,000 per year, which in the first years is probably unrealistic, meaning that later contributions need to be significantly higher to make up for the shortfall.

What you should also see is that delaying starting to save for ten years, and so only saving for 30 years, means that the accumulated fund would only be worth $69,761. If saving for retirement is left even later, then it will grow even less, meaning that more will have to be saved to achieve someone's plans. Clearly, the amount saved into a pension would not stay the same from year to year, and the return would vary, but it does emphasise the power of compounding and the impact of delaying saving for retirement.



1.6 Estate Planning

Estate planning is concerned with making sure that a client takes appropriate steps to ensure that their accumulated wealth passes to their intended beneficiaries in as tax-efficient a method as possible.

It can be a complex subject, but essentially involves determining who is to inherit the assets of the client and what steps can be taken to reduce any estate taxes that will arise on the client's death.

A key first step in estate planning is to assess the extent of a client's assets and liabilities. These include their property, savings and any investments, but it is also necessary to identify any other funds that would become payable if the client were to die, such as the proceeds of any life assurance policies or the payment of death benefits if the client is still working. The assessment of a client's liabilities should also take account of any protection policies that may be in place to meet that liability, such as a mortgage protection policy.

This balance sheet can then be used to direct the client to consider the following three key areas:

1. Whether they need to execute a power of attorney (POA) to protect their interests when they are incapable of managing their affairs.
2. Whom they wish to inherit their estate and whether there are any specific gifts they wish to make which should be expressed in a will.
3. The extent of any liability to inheritance tax (IHT) that may arise and whether action should be taken to mitigate this.

A will is a legal document that specifies what is to happen to an individual's assets on their death. Obviously, where possible, the client should make a will in order to ensure that the assets of their estate pass in accordance with their wishes and should take specialist advice so that relevant laws are taken into account.

A will is generally regarded as being essential for everyone, but particularly so in the case of a family with young children and in the case of a second marriage. A family with young children needs to consider what would happen to the children if their parents were unfortunate enough to be involved in a fatal accident. Who would look after the children? Who would invest any money until they came of age? What would happen if the children needed some essential expenditure, such as the payment of school fees? A properly drafted will could ensure that all of these points were provided for. In the case of a second marriage, the partners may wish their assets to be split in precise ways on the death of the survivor. Again, a carefully drafted will can achieve this.

If overseas assets are held, especially property, separate wills should be made in each country. Generally, these should be drafted by a specialist in the jurisdiction in question.

If no will is made, the legal system will determine who inherits. When a person dies without leaving a will, they are described as having died intestate and a set of intestacy rules will determine who is to inherit. These rules may well provide for the estate to pass in a way that the client would not have intended.

1.7 Tax Planning

The subject of tax avoidance is a major issue in many countries. At times of austerity and cuts in public services, the extent to which wealthy individuals and multinational companies have avoided taxes has been widely condemned and is leading to new definitions of what is acceptable.

Tax Avoidance versus Tax Evasion	
Tax avoidance	• Tax avoidance is, generally, the legal exploitation of the tax system to one's own advantage to attempt to reduce the amount of tax that is payable by means that are within the law, while making a full disclosure of the material information to the tax authorities.
Tax evasion	• By contrast, tax evasion is the general term for efforts by individuals, companies, trusts and other entities to evade the payment of taxes by illegal means.

While the difference between tax avoidance and tax evasion used to be simply expressed as the first being legal and the second being illegal, public perceptions of what is acceptable tax avoidance are leading to the terms being more carefully defined.

The term 'tax mitigation' is now being used to refer to acceptable tax planning. It refers to minimising tax liabilities in ways that are expressly endorsed by tax legislation. By contrast, tax avoidance flouts the spirit of the law and is, therefore, thought by some to be unacceptable, albeit not criminal in the way that evasion is.

International cooperation is increasingly being used to improve the exchange of information between countries in order to counter tax avoidance and evasion globally.

1.8 Offshore Considerations

Each country has its own rules which determine an individual's liability to tax on income, gains and on assets liable to IHT or a wealth tax.

Most countries' tax systems can be loosely categorised as either a worldwide or territorial-based system of taxation:

- Under a worldwide system of taxation, residents of that country are taxed on their worldwide income and capital gains irrespective of where the income or gains arise. For example, the US has a worldwide-based system of taxation as does the UK, Australia, Germany, Italy and Japan.
- Under a territorial-based system of taxation, residents are taxed only on income and capital gains arising in that country, and income and gains arising outside of that country are not liable to tax.
- Some countries that adopt the territorial-based system, however, extend the tax base of residents to include overseas income and gains, but only if such income or gain is remitted to the country of residence.

2. Legal Concepts in Financial Advice

Learning Objective

10.3.1 Understand the key legal concepts relating to: legal persons (wills/intestacy/personal representatives/trustees/companies/limited liabilities/partnerships); contract, capacity to contract; agency; real estate, personal property and joint ownership; powers of attorney; insolvency and bankruptcy; identifying, reporting scams

Unsurprisingly, the legal systems in each jurisdiction have a significant impact on the provision of financial services. It is important, therefore, to be aware of some of the common legal concepts and how these may affect the provision of financial advice and services.

2.1 Legal Persons and Capacity

A legal person is an individual or an entity that is recognised as having legal rights and obligations, such as having the ability to enter into contracts, to sue, and to be sued. Entities can take many forms, such as companies, partnerships and trusts.

2.1.1 Individuals

Individuals acquire their status as legal persons when they are born, but their legal capacity to enter into contracts or otherwise exercise their rights is limited in certain circumstances.

A person who is of age and of sound mind has the legal capacity to make their own choices and decisions, and so they can enter into contracts providing that it is not illegal or void for reasons of public policy. The relevance of this for a financial services firm is that they can, for example, open accounts, enter into agreements and give instructions to trade with individuals they know are of age and of sound mind.

Where someone is underaged, however, the position is different. In the UK, individuals under 18 are known as minors and they are able to enter into a contract under law; however, the contract is binding on the adult, but it is voidable by the minor before they reach 18 and for a short time afterwards. This means that the minor can enforce the contract, but can also terminate it if they wish (subject to some exceptions). Once the minor reaches the age of 18 and ratifies the contract in some way, it becomes legally binding on both parties.

This legal position does not mean that banks do not offer banking accounts to those under 18. It does mean, however, that they may put additional requirements in place to protect themselves, especially where accounts are opened for children under 16.

2.1.2 Attorneys and Deputies

A person who has legal capacity can authorise someone else to act for them by executing a POA, which is a legal document that authorises someone to act on their behalf.

There are different types of POAs, and these vary by jurisdiction.

Ordinary Power of Attorney (OPA)

An ordinary power of attorney (OPA) or general power of attorney (in the US) authorises one or more persons, known as attorneys, to make financial decisions on an individual's behalf or to undertake specific actions. Individuals may use this for a number of reasons, for example, if they are out of the country and legal documents need to be executed, or if they are in hospital and unable temporarily to look after their financial affairs. It will usually end either at a specified time or upon the request of the donor at any time and it will automatically be revoked if the donor loses mental capacity. A bank or financial institution will need to check the document to confirm their authority to act and the attorney's identity before accepting any instructions.

Lasting Power of Attorney (LPA)

If an individual wants someone to be able to act on their behalf should there come a time when they no longer have the mental capacity to make their own decisions, then they can execute a lasting power of attorney (LPA). This is also known as 'durable power of attorney' in the US.

2.1.3 Personal Representatives

When a person dies, someone will need to collect their assets, settle any debts and distribute the balance to whoever is entitled to the remainder, ie, the beneficiaries. The person who is responsible for administering the estate of the deceased is known as a personal representative and can be either an executor or an administrator.

To be able to take control of the assets, the executor or administrator needs to be able to prove that they have the authority to do so. They do this by applying for a grant of representation which can be either a grant of probate or a grant of letters of administration.

The following two scenarios exist:

- Where the deceased leaves a will, they may appoint someone to deal with their affairs on death. This person is known as the executor of the estate and they apply for a grant of probate.
- Where no will is left, then no executor is named or, if the named executor does not wish to act, someone else needs to be appointed to deal with the deceased's affairs. This person is known as the administrator of the estate and they apply for a grant of letters of administration.

The grant of probate or grant of letters of administration is a legal document that bears the seal of the court and formally confirms the appointment of the executor(s) or administrator(s). Once issued, the grant is then registered with each financial institution and is official proof of the appointment of the executor or administrator. This now allows the firm to take instructions from them as to how they wish to deal with the assets.

2.1.4 Trusts

A trust is the legal means by which one person gives property to another person to look after on behalf of yet another individual or set of individuals. The person who creates the trust is known as the settlor. The person they give the property to, in order to look after on behalf of others, is called the trustee, and the individuals for whom it is intended are known as the beneficiaries.

The terms of a trust are set out in a trust deed which will also appoint the trustees and give them powers to manage the trust and invest the assets. Assets are transferred into the trust, and this involves the trustees becoming the legal owners of the assets although they continue to hold these on the terms of the trust and for the benefit of the beneficiaries.

As the trustees are responsible for managing the trust and are the legal owners of its assets, they have the legal capacity to enter into contracts on behalf of the trust. A financial institution will, therefore, need to see the trust deed and check the document to confirm the trustees' authority to act and confirm their identity before accepting any instructions.

2.1.5 Companies

A company is a legal entity formed to conduct business or other activities in the name of its members. Because it is incorporated, it has a legal personality distinct from those of its members. This gives shareholders 'limited liability', ie, their liability is restricted to the amount of their investment in the company.

A company is, therefore, a separate entity from its shareholders. It is a legal person in its own right and it is quite separate from those who own it (the shareholders) and those who run it (the directors).

A company operates through its directors who are empowered to run it and enter into contracts on its behalf. A financial institution will, therefore, need to see the incorporation documents of the company and satisfy itself that the person it is dealing with is a director or is authorised by the board of directors to act.

2.1.6 Partnerships

A partnership exists when two or more persons commence in business together with a view to making a profit. Certain persons are unable to form partnerships, including charities and not-for-profit organisations (NPOs).

While there does not need to be any written agreement for a partnership to exist, there will normally be a partnership agreement that takes the form of a deed setting out the way in which the partnership will operate. The partners are at liberty to decide on the terms of their own relationship and may choose almost any conditions they wish as long as they are agreed to by all of the partners.

There are three types of partnership in the UK, each defined by a different partnership act:

- **Conventional partnership** – this is not a separate legal entity from its owners. Partners are responsible for their own and each other's debts, and each partner can sue and be sued in their own name. The partnership is unable to hold land and property in its name and instead any contract is with the individuals forming the partnership.
- **Limited partnership** – at least one partner must have unlimited liability, referred to as a general partner, while the others have limited liability.
- **Limited liability partnership (LLP)** – this is a corporate version of a partnership. An LLP is a separate legal entity to its members (the partners) and so may hold land and property in its own name. LLPs have designated partners who are the equivalent to company officers.

2.1.7 Agency

The law of agency refers to a set of rules designed to ensure the smooth functioning of businesses by setting out the scope of the authority granted to an agent.

In a relationship between a principal and agent, the function of the agent is to create a contract between the principal and third parties or to act as the representative of the principal in other ways.

An example is where a landlord buys or sells property. They will appoint an estate agent to deal with finding a buyer for a property that they wish to sell, with a solicitor acting to deal with any problems that might arise regarding the conveyance of the legal title. They may also appoint a letting agent whose role is to find a tenant for the landlord and who will sometimes even sign the tenancy agreement on the landlord's behalf. In each case, they are acting as agent, but their authority to act may differ. A key point, therefore, is the power of the agent to bind their principal in a contract which the agent makes on their behalf, sometimes without the principal being aware that this is happening.

If the agent exceeds this authority, then the principal will not be bound and the agent will be personally liable to the third party for breach of warranty of authority. However, the common law may extend the scope of the agent's authority beyond this to protect an innocent third party. The principal will then be bound to the third party, but the principal can sue the agent for overstepping their actual authority, if it is a breach of the agency contract.

2.2 Ownership of Property

Most legal systems recognise two types of property – real property and personal property. The distinction arises for common law. However, modern laws continue to distinguish between the two and different laws apply to personal property than the ones applicable to real property.

Personal property includes possessions of any kind, as long as they are considered **movable property** and owned by someone. It includes tangible items, such as furniture and vehicles, and intangible items, such as bonds and shares.

Real property or **immovable property** is that property which is fixed permanently to one location. This includes land and anything that is built on it. It also includes anything that is growing on the land or that exists under it. Examples include land, buildings, crops and mineral rights.

2.2.1 Joint Ownership

Where assets are held in joint names, the surviving joint owner takes the deceased's share automatically. The surviving joint owner needs to register the death certificate with the bank or other financial institutions. This should then transfer the asset into the sole name of the survivor.

Example

A husband and wife have joint savings accounts at the time the husband dies. The wife would need to register her husband's death certificate with each bank who will then automatically transfer the account into her name and take her sole instructions on what is to happen to the account. It is not necessary to produce a grant of probate (otherwise referred to as confirmation or letters of administration). This is usually issued by a court.

There is an alternative type of joint ownership known as tenancy in common. This is where an asset is owned by one or more individuals who could own the asset in equal shares or potentially in unequal shares. This could be an asset such as land or simply a bank account that is held in this way for administrative convenience.

The major difference with tenancy in common is that if one of the owners dies, their share of the property does not automatically pass to the surviving owner; it would pass to whoever they specified in a will or, if a will is not made, in accordance with the rules of intestacy.

2.3 Insolvency and Bankruptcy

Insolvency is where the liabilities of a business or an individual (ie, what they owe) exceed their assets (ie, what they own), or where they are unable to repay their debts as they fall due. Insolvency is a term that is used to describe all types of financial failure (bankruptcy only applies to an individual, not a partnership entity or a limited company).

Bankruptcy usually lasts for a year if the individual cooperates with the official receiver or their trustee in bankruptcy. It is worth noting that, until you are made bankrupt, bailiffs can still call at your door to attempt to take goods.

With companies, the two main processes encountered are liquidation and administration:

- A liquidation is the legal ending of a limited company. Following liquidation, a business will be removed from the official Companies House register – a process known as being 'struck off'. From this point, that business ceases to legally exist. Both solvent and insolvent companies can be liquidated, however, the process for doing so differs slightly for each. A liquidator will sell a business' assets, pay the firm's creditors and distribute any remaining share capital to shareholders.
- Where a company is placed into administration, an insolvency practitioner or 'administrator' is appointed to take control of the company. The administrator will devise a plan to:
  - restore the company's viability while coming to an arrangement with its creditors
  - realise the company's assets to pay a particular creditor, or
  - sell the business as a going concern on the basis that more money can be made from its assets than if the firm was liquidated.

2.4 Identifying and Reporting Scams

Scams are schemes to con people out of their money. They can be by post, telephone, text message, email, or a scammer may simply turn up at someone's home. Scams can affect many different types of people and anyone who thinks they have been the victim of a scam should report it. Reporting authorities vary by jurisdiction. In the UK, for example, scams should be reported to Action Fraud (actionfraud.police.uk). In the US, the Department of Justice publishes a list of investigative agencies such as the Federal Trade Commission for reporting instances of consumer fraud and identity theft, and the Securities and Exchange Commission (SEC) who will investigate scams relating to securities and investments. In Europe, the European Anti-Fraud Office (OLAF) is responsible for safeguarding against frauds and scams, carrying out independent investigations into fraud and corruption involving EU funds, and developing a sound EU anti-fraud policy.

3. The Financial Advice Process

Learning Objective

10.2.1 Understand the key factors in the financial advice process: the client relationship; affordability, suitability, attitude to risk; matching solutions with needs; use of communication skills in giving advice; monitoring and reviewing clients' circumstances; information given to clients; consumer rights and remedies, including awareness of their limitations

---

The financial advice process has developed significantly over recent years to meet the higher standards demanded in these days of increasing professionalism and regulatory scrutiny.

While an adviser needs to have a detailed understanding of the myriad of investment products and solutions that are available in the market, and of the tax implications of various investments, this technical knowledge is only of value to the client if it is applied within a structured advice process. This needs to take the whole of the client's circumstances into account in such a way that any recommendations are suitable for their needs.

The financial planning process can be divided into five distinct stages:

1. Determine the client's requirements.
2. Formulate the strategy to meet the client's objectives.
3. Implement the strategy by selecting suitable products.
4. Revisit the recommended investments to ensure that they continue to meet the client's needs.
5. Periodically revisit the client's objectives and revise the strategy and products held, if needed.

3.1 Client Relationships and Communication Skills

The process above misses out a key step in the financial advice process, namely establishing an effective relationship with the client that allows the adviser to gather all of the information needed for suitable advice to be given, for the adviser to gain the trust of the client and for questions, explanations and recommendations to be given in a clear and understandable manner. It is only by engaging the client in the financial advice process and ensuring that they fully understand why the information is needed and why recommendations are being made that the best results can be obtained.

The nature of the relationship with a client will depend upon the service being provided. This can range from providing the facilities to execute transactions without any advice, to ongoing relationships that deal with selected financial areas only, are limited to investment management only, or extend to in-depth wealth management or private banking. The client relationship can, therefore, be a one-off service to satisfy a client's needs, or a long-term relationship where the adviser plays a key role in the client achieving their long-term financial objectives.

Whatever the service, an adviser has a fiduciary duty to their client that requires them to observe the highest standards of personal conduct, and to fully respect the confidence and trust implicit in that relationship. The main responsibilities of the adviser can, therefore, be seen as:

- helping clients to decide on, and prioritise objectives
- documenting the client's investment objectives and risk tolerance
- determining, and agreeing, an appropriate investment strategy
- acting in the client's best interest
- where agreed, keeping the products under review, and
- carrying out any necessary administration and accounting.

Most financial firms spend significant amounts of time and money on training their advisers in communication techniques. Techniques that need to be honed include:

- establishing a rapport with the client
- making it clear early on what the purpose of a meeting is
- explaining that the information collection exercise is to ensure the quality of the advice that will be given
- using a mixture of open-ended and closed-ended questions to establish the information needed
- using everyday terminology and explaining jargon when it has to be used
- checking understanding
- establishing priorities and getting the client to confirm their agreement, and
- guiding and controlling the pace of the interview.

It is also about listening – the best financial advisers are the ones who listen to what the client wants, establish rapport with them and then mutually agree what needs to be done.

At the end of the day, short-circuiting the process by not ascertaining all relevant information is alien to any professional approach and is in fundamental contradiction to the adviser's fiduciary duty and to all regulation.

3.2 Matching Solutions with Needs

An adviser must 'know' the customer before being able to provide appropriate advice. It is essential to establish the fullest details about the client – not only their assets and liabilities, but their life assurance or protection products or arrangements that they may have in place. Their family circumstances, health and future plans and expectations are equally important.

As an example, one of the Financial Conduct Authority's (FCA's) 11 Principles for Businesses requires a firm to take reasonable care to ensure the suitability of its advice and discretionary decisions – Principle 9 Customers: Relationships of trust. To comply with this, a firm should obtain sufficient information about its customers to enable it to meet its responsibility to give suitable advice. This requirement to gather sufficient information about the customer is generally referred to as the 'know your customer' (KYC) requirement.

The purpose of gathering information about the client is clearly so that financial plans can be devised and appropriate recommendations made. The types of information that should be gathered include:

- **personal details** – name, address, age, health, family and dependants
- **financial details** – income, outgoings, assets, liabilities, insurance and protection arrangements
- **objectives** – growth, protecting real value of capital, generating income, protecting against future events
- **risk tolerance** – cautious, balanced, adventurous
- **liquidity and time horizons** – immediate needs, known future liabilities, need for an emergency reserve
- **tax status** – income, capital gains, inheritance taxes, available allowances, and
- **investment preferences** – restrictions, ethical considerations.

There is no simple way of establishing all of the necessary information quickly. The adviser will need to undertake a detailed, and potentially lengthy, interview with the client in order to understand what existing assets and liabilities they have before turning to developing a true understanding of what their needs are.

Only having completed this process can the adviser then start on the next significant stage: to identify potential solutions and then match them to the client's needs and demands. Firms must then ensure that any recommendations they make are both suitable and appropriate. In order to do so, a firm should ensure that the information they gather also includes details about:

- a client's knowledge and experience in relation to the investment or service that will be considered for recommendation, and
- the level of investment risk that the client can bear financially and whether that is consistent with their investment objectives.

3.3 Attitude to Risk

A key element of the financial advice process is establishing the client's risk profile.

Investment always involves a trade-off between risk and return. However, different people are prepared to tolerate different levels of investment risk and this risk means different things to different people. Variations in attitude arise because of individual differences in circumstances, experiences and psychological makeup.

The client's risk profile should be based on their risk tolerance, attitude to risk and capacity for loss.

Risk Assessment	
Risk tolerance	• This is a personality characteristic best described as a client's willingness to accept a certain level of fluctuation in the value of their investments without feeling an immediate desire to sell.
Attitude to risk	• This represents the client's personal opinion on the risks associated with making an investment, based on their prior knowledge and experience.
Capacity for loss	• This is the client's actual ability to absorb any financial losses that might arise from making a particular investment.

The risk profile of a client will have a considerable impact on the financial planning strategy that an adviser recommends. It will exhibit itself in the importance that is given to financial protection and in what is an acceptable selection of investment products.

A client's ability to take risk can be determined in an objective manner by assessing their wealth and income relative to any liabilities. By contrast, their willingness to take risk is subjective and has more to do with an individual's psychological makeup than their financial circumstances. Some clients view market volatility as an opportunity while, for others, such volatility would cause distress.

Examples of the objective and subjective factors that can be established that will help define a client's risk profile are shown below:

Examples of Objective Factors	
Timescale	• The timescale over which a client may be able to invest will determine both what products are suitable and what risk should be adopted. • For example, there would be little justification in selecting a high-risk investment for funds that are held to meet a liability that is due in 12 months' time. By contrast, someone in their 30s choosing to invest for retirement is aiming for long-term growth; therefore, higher-risk investments would then be suitable.
Commitments	• Family commitments are likely to have a significant impact on a client's risk profile. • For example, if a client needs to support elderly relatives, or children through university, this will have a determining influence on what risk they can assume. While by nature they may be adventurous investors, they will want to meet their obligations, and this will make higher-risk investments less suitable.
Wealth	• Wealth will clearly be an important factor in the risk that can be assumed. • A client with few assets can little afford to lose them, while ones whose immediate financial priorities are covered may be able to accept greater risk.
Life-cycle	• Stage of life is equally important. • A client in their 30s or 40s who is investing for retirement will want to aim for long-term growth and may be prepared to accept a higher risk in order to see their funds grow. • As retirement approaches, this will change as the client seeks to lock in the growth that has been made, and, once they retire, they will be looking for investments that will provide a secure income that they can live on.
Age	• The age of the client will often be used in conjunction with the factors above to determine acceptable levels of risk (as some of the examples have already shown).

Establishing objective factors is clearly a simpler and more accurate part of defining a client's risk tolerance, but subjective factors also have a part to play. A client may well be financially able to invest in higher-risk products and these may well suit their needs, but if they are cautious by nature, they may well find the uncertainties of holding volatile investments unsettling, and both the adviser and the client may have to accept that lower-risk investments and returns must be selected.

Examples of Subjective Factors	
A client's level of financial knowledge	• Generally speaking, investors who are more knowledgeable about financial matters are more willing to accept investment risk. This level of understanding does still need, however, to be tested against their willingness to tolerate differing levels of losses.
A client's comfort with a level of risk	• Some individuals have a psychological makeup that enables them to take risks more freely than others and to see such risks as opportunities.
A client's preferred investment choice	• Risk attitude can also be gauged by assessing a client's normal preferences for different types of investments, such as the relative safety of a bank account versus the potential risk of stocks and shares.
A client's approach to bad decisions	• This refers to how a client regrets certain investment decisions and is the negative emotion that arises from making a decision that is, after the fact, wrong. • Some clients can take the view that they assessed the opportunity fully and, therefore, any loss is just a cost of investing. Others regret their wrong decisions and, therefore, avoid similar scenarios in the future.

Attempting to fully understand a client's risk attitude requires skill and experience, therefore, establishing an investor's risk profile is not straightforward.

Defining risk profiles, such as cautious, balanced or adventurous, has limitations, not least in trying to help a client understand the differences and then agree which is applicable to them. As a result, many financial services companies have different methods of assessment. The key point is that the adviser needs to understand the client's attitude to risk and the risk characteristics of different assets and products if they are to match appropriate solutions with the client's needs.

3.4 Suitability and Affordability

Once a clear picture of requirements and needs is established, the steps expected of a firm to ensure that its recommendations are suitable and appropriate will vary depending upon the needs and priorities of the client, the types of investment or service being offered and the nature of the relationship between the firm and the client.

When a firm proposes to offer investment advisory services or discretionary portfolio management, it must first assess whether such services are suitable for a professional client or a retail client. If the firm intends to offer other investment services (eg, trading derivatives such as contracts for difference), then it must ensure that they are appropriate for the client.

In assessing the client's knowledge and experience, the firm should gather information on:

- the types of services and transactions with which the client is familiar
- the nature, volume, frequency and time that the client has been involved in such services and transactions, and
- the client's level of education, profession or relevant former profession.

The general requirement is that the firm must take reasonable steps to ensure it makes no personal recommendation to a client unless it is suitable for them. Suitability will have regard to the facts disclosed by the client and other facts that the firm should reasonably be aware of.

Having assessed what services and products are suitable and appropriate, the firm should provide the client with a report which should set out, among other things, why the firm has concluded that a recommended transaction is suitable.

3.5 Information Given to Clients

As well as acting in the client's best interests, financial advisers also need to ensure that they provide sufficient information about their firm and any proposed investments to the client.

The purpose of this duty to disclose material information is to ensure that the client has all the information needed to ensure that they are in a position to make a full and informed decision about the suitability of the recommendations being made.

What constitutes 'material information' will depend upon the investments and products being recommended, but it would include areas such as charges, cancellation rights, early encashment penalties, risk warnings and any special or non-standard terms. Examples of the scenarios in which disclosure of material information may be relevant include financial planning reports, suitability reports, key investor information documents (KIIDs) and simplified prospectuses for a mutual fund.

Where the firm will be providing ongoing services, it should provide details about how it will go about managing the client's money and the arrangements it will put in place for safeguarding the client's assets.

3.6 Consumer Rights

As in other areas of consumer law, the rights of a consumer in financial services are dictated by the terms of the contract drawn up between the client and the financial institution. In addition, there are rules surrounding unfair terms in contracts and on consumer credit, and the right for customers to change their mind.

In certain circumstances, clients who are buying certain investment or insurance products or services are entitled to a period of reflection during which they can decide whether or not to proceed with their purchase. This period for reflection is known as the 'cooling-off' period.

If a right to cancel is provided to a client, the firm must give a clear and prominent notice in writing, either before or, if not possible, immediately after the sale. They must inform the client of:

- the existence of the right to cancel or withdraw
- its duration
- the conditions for exercising it, including any amount the client may have to pay
- what happens if the client does not exercise the right, and
- any other practical details the client may need.

If the client exercises their right to cancel, the effect is that they withdraw from the contract, which is then terminated.

3.7 Monitoring and Reviewing the Client's Circumstances

Financial planning is not a one-off process. In part, this is because of the possibility of change. The following are examples of reasons for a client's plans changing:

- The environment changes around them – for example, the tax regime changes (remember, tax allowances are generally reviewed every year at a minimum).
- Their employment status alters.
- The stock market performs better, or worse, than the client had anticipated.
- The client's circumstances change or their needs, wants and aspirations change. For example, when the client marries or divorces, inherits a sum of money or has a child, not only will their needs change, but their attitudes to finance may also alter and they may, for example, become more or less risk averse.

It is important that clients review their plans and monitor progress towards objectives. Without regular updates, it is impossible to know whether financial goals are likely to be achieved. Fairly small changes in financial behaviour can, together, have a significant cumulative effect on a client's finances, so a periodic review can be very helpful in ensuring that the client stays on track.

Firms providing investment advice to a client must agree with them as to whether a periodic assessment of the continued suitability of the client's existing investments will be made each time a review is undertaken. This periodic assessment should be completed at least annually, and its frequency should be increased to take account of the risk profile of the relevant client and the types of financial instruments recommended. Where a firm provides a portfolio management service, or has informed the client it will carry out a periodic suitability assessment, it must provide the client with a periodic suitability report which contains an updated statement of how the investments meet the preferences, objectives and other characteristics of the client.

End of Chapter Questions

Think of an answer for each question and refer to the appropriate section for confirmation.

1. **What advantages can be expected when an individual undertakes a budgeting exercise?**
   Answer reference: Section 1.1

2. **What are examples of 'good' debts and 'bad' debts?**
   Answer reference: Section 1.2

3. **What is the purpose of critical illness cover?**
   Answer reference: Section 1.3.1

4. **Which types of protection should a consumer who takes a mortgage consider?**
   Answer reference: Section 1.3.3

5. **What is the difference between savings and investments?**
   Answer reference: Section 1.4

6. **Why might a deputy act for an individual?**
   Answer reference: Section 2.1.2

7. **How does joint tenancy differ from tenancy in common?**
   Answer reference: Section 2.2.1

8. **What are the main stages of the financial advice process?**
   Answer reference: Section 3

9. **What is the difference between risk tolerance and capacity for loss?**
   Answer reference: Section 3.3

10. **What is the purpose of the information that firms must provide to clients before they enter into any contracts?**
    Answer reference: Section 3.5

Glossary

Active Management
A type of investment approach employed to generate returns in excess of the market.

Alternatives
Alternatives include a broad range of private markets including private equities, private debt, real assets which include infrastructure and esoteric assets like antiques and collectibles.

Annual General Meeting (AGM)
Yearly meeting of shareholders. Mainly used to vote on dividends, appoint directors and approve financial statements. Also referred to as a stockholder meeting or an Annual General Assembly in some jurisdictions.

Articles of Association
The legal document which sets out the internal constitution of a company. Included within the articles will be details of shareholder voting rights and company borrowing powers.

Authorised Corporate Director (ACD)
Fund manager for an open-ended investment company (OEIC).

Authorised Shares
The number of shares that can be issued for a new company, set at outset.

Balance of Payments
A summary of all the transactions between a country and the rest of the world. The difference between a country's imports and exports.

Bid Price
Bond and share prices are quoted as bid and offer. The bid is the lower of the two prices and is the one that would be received when selling.

Blockchain
Otherwise known as distributed ledger technology (DLT). A blockchain is a database or ledger, shared across a computer network, maintaining a secure and decentralised record of transactions. The block has layers and is structured into block headers, nodes and hashes that enable replication and distribution, which means multiple copies are saved on many machines, and all must match. They, in turn, create rules that fortify the way the block is structured, and once created, the block cannot be changed and negates the need for third parties to maintain the ledger.

Bonds
Debt securities which typically entitle holders to annual interest and repayment at maturity. Commonly issued by both companies and governments.

Bonus Issue
A free issue of shares to existing shareholders. No money is paid. The share price falls pro rata. Also known as a capitalisation or scrip issue.

Call Option
Option giving its buyer the right to buy an asset at an agreed price.

Capital Gains Tax (CGT)
Tax payable by individuals on profit made on the disposal of certain assets.

Central Bank
Central banks typically have responsibility for setting a country's or a region's short-term interest rate, controlling the money supply, acting as banker and lender of last resort to the banking system, and managing the national debt.

Closed Economy
A country that has little or no trading relationship with other countries and is not a member of any trading unions or agreements. Such countries may choose to operate a closed economy for political, religious or economic reasons. Alternatively, a country may find themselves unable to trade outwardly, or, lastly, sanctioned and prohibited from trading with other countries.

Commercial Lending
A commercial loan is a debt-based funding arrangement between a business and a financial institution such as a bank.

Commodity
Items including sugar, wheat, oil and copper. Derivatives of commodities are traded on exchanges (eg, oil futures on ICE Futures).

Consumer Price Index (CPI)
Index that measures the movement of prices faced by a typical consumer.

Convertible Bond
A bond which can be converted, at the investor's choice, into the same company's shares.

Cryptocurrency
A cryptocurrency, crypto-currency, or crypto is a digital currency (or digital property) designed to work through a computer network that is not reliant on any central authority, such as a government or bank, to uphold or maintain it. Individual coin ownership records are stored in a digital ledger, which is a computerised database using strong cryptography to secure transaction records, control the creation of additional coins, and verify the transfer of coin ownership.

Cum-Dividend
Meaning with dividend, this indicates that a company is paying out dividends in the near future.

Dark Web
The dark web is the World Wide Web content that exists on darknets (overlay networks) that use the Internet but require specific software, configurations, or authorisation to access.

Debenture
In the US, a debenture is a type of bond or other debt instrument that is unsecured by collateral. Since debentures have no collateral backing, they must rely on the creditworthiness and reputation of the issuer for support. Both corporations and governments frequently issue debentures to raise capital or funds. The structure of debentures can vary in the UK and in other markets.

Derivatives
Options, futures and swaps. Their price is derived from an underlying asset.

Diversification
Investment strategy of spreading risk by investing in a range of investments.

Dividend
Distribution of profits by a company.

Dividend Yield
Most recent dividend as a percentage of current share price.

Dual-Pricing
System in which a unit trust manager quotes two prices at which investors can sell and buy.

Economic Cycle
The course an economy conventionally takes as economic growth fluctuates over time. Also known as the business cycle.

Economic Growth
The growth of GDP (gross domestic product) or GNP (gross national product) expressed in real terms, usually over the course of a calendar year. Often used as a barometer of an economy's health.

Equity
Another name for shares. Shares represent the equity interest (assets minus liabilities) of the shareholders of the company.

Eurobond
An interest-bearing security issued internationally.

Euronext
European stock exchange network formed by the merger of the Paris, Brussels, Amsterdam and Lisbon exchanges and which has merged with the New York Stock Exchange (NYSE). Now part of the ICE (Intercontinental Exchange) group.

Exchange
Marketplace for trading investments.

Exchange Rate
The rate at which one currency can be exchanged for another.

Ex-Dividend (xd)
The period during which the purchase of shares or bonds (on which a dividend or coupon payment has been declared) does not entitle the new holder to this next dividend or interest payment.

Exercise Price
The price at which the right conferred by an option can be exercised by the holder against the writer.

Fiscal Policy
The use of government spending, taxation and borrowing policies to either boost or restrain domestic demand in the economy so as to maintain full employment and price stability.

Floating Rate Notes (FRNs)
Debt securities issued with a coupon that periodically changes based on a benchmark interest rate.

Forex
Abbreviation for foreign exchange (FX) trading.

Forward
A derivatives contract that creates a legally binding obligation between two parties for one to buy and the other to sell a pre-specified amount of an asset at a pre-specified price on a pre-specified future date. As individually negotiated contracts, forwards are not traded on a derivatives exchange.

Forward Exchange Rate
An exchange rate set today, embodied in a forward contract, that will apply to a foreign exchange transaction at some pre-specified point in the future.

Fund Manager
Firm that invests money on behalf of customers.

Future
An agreement to buy or sell an item at a future date, at a price agreed today. Differs from a forward in that it is a standardised amount and therefore the contract can be traded on an exchange.

Greenwashing
Greenwashing is the process of misleading how a company's products or activities meet ESG expectations. Greenwashing may involve unsubstantiated claims or labels that confer or infer that a company's products are ESG compliant/focussed or have a greater positive impact than they actually do.

Hedging
The purchase or sale of a commodity, security or other financial instrument for the purpose of offsetting the profit or loss of another security.

Immovable Property
Referring to real property such as real estate or land, immovable property is fixed permanently to one location. It, therefore, includes land and anything that is built on it. It also includes anything that is growing on the land or that exists under it. Examples include land, buildings, crops and mineral rights.

Inflation
An increase in the general level of prices.

Initial Public Offering (IPO)
A new issue of ordinary shares whether made by an offer for sale, an offer for subscription or a placing. Also known as a new issue.

Insider Dealing/Trading
Criminal offence by people with unpublished price-sensitive information who deal, advise others to deal or pass the information on.

Intercontinental Exchange (ICE)
Intercontinental Exchange operates regulated global futures exchanges and over-the-counter (OTC) markets for agricultural, energy, equity index and currency contracts, as well as credit derivatives. ICE conducts its energy futures markets through ICE Futures Europe, which is based in London and also owns LIFFE.

Investment Bank
Business that specialises in raising debt and equity for companies.

Investment Company with Variable Capital (ICVC)
Alternative term for an OEIC.

Investment Trust
A company – not a trust – which invests in a diversified range of investments.

Liquidity
Ease with which an item can be traded on the market. Liquid markets are described as deep.

Loan Stock
A corporate bond issued in the domestic bond market without any underlying collateral, or security.

London Stock Exchange (LSE)
The main UK market for securities.

Magic Square of Economic Policy
One way that effectiveness can be measured is through the 'Magic Square of economic policy' that highlights four main goals of economic policy: growth, full employment, price stability, and balanced trade.

Market Capitalisation
Total market value of a company's shares.

Market Maker
A stock exchange member firm which quotes prices and trades stocks during the mandatory quote period.

Maturity
Date when the capital on a bond is repaid.

Mixed Economy
Economy which works through a combination of market forces and government involvement.

Monetary Policy
The setting of short-term interest rates by a central bank in order to manage domestic demand and achieve price stability in the economy.

Movable Property
Movable property or 'movables' refer to property that can be moved from one place to another and includes personal items, such as vehicles and jewellery.

Multilateral Trading Facilities (MTFs)
Systems that bring together multiple parties that are interested in buying and selling financial instruments including shares, bonds and derivatives.

NASDAQ
US market specialising in the shares of technology companies.

National Debt
A government's total outstanding borrowing resulting from financing successive budget deficits, mainly through the issue of government-backed securities.

Nominal Value
The amount of a bond that will be repaid on maturity. Also known as face or par value.

Notional Principal
The starting cash value (size) of the asset upon which the transaction is derived from.

Offer Price
Bond and share prices are quoted as bid and offer. The offer is the higher of the two prices and is the one that would be received when buying.

Open Economy
Country with no restrictions on trading with other countries.

Open-Ended Investment Company (OEIC)
Collective investment vehicle similar to unit trusts. Alternatively described as an ICVC (investment company with variable capital).

Open Outcry
Trading system used by some derivatives exchanges. Participants stand on the floor of the exchange and call out transactions they would like to undertake.

Opening
Undertaking a transaction which creates a long or short position.

Option
A derivative giving the buyer the right, but not the obligation, to buy or sell an asset.

Order-Driven
An order-driven market is where buyers and sellers are matched in strict chronological order by price and the quantity of shares being traded, and do not require market makers.

Over-The-Counter (OTC)
The OTC market is where securities trade via a broker-dealer network instead of on a centralised exchange.

Passive Management
An investment approach employed in those securities markets that are believed to be price-efficient.

Preference Share/Preferred Stock
Shares which pay fixed dividends. Shareholders do not have voting rights, but do have preference over ordinary shares in default situations.

Premium
The amount of cash paid by the holder of an option to the writer in exchange for conferring a right.

Primary Market
The function of a stock exchange in bringing securities to the market and raising funds.

Put Option
Option when buyer has the right to sell an asset.

Quasi-Asset
An instrument, security or property that behaves like an asset class but not yet recognised or regulated as an accepted asset class; for example, digital property like cryptocurrencies and NFTs.

Quote-Driven
Dealing system driven by securities firms who quote buying and selling prices.

Real Estate Investment Trust (REIT)
An investment trust that specialises in investing in commercial property.

Redemption
The repayment of principal to the holder of a redeemable security.

Resolution
Proposal on which shareholders vote.

Retail Bank
Organisation that provides banking facilities to individuals and small/medium businesses.

Rights Issue
The issue of new ordinary shares to a company's shareholders in proportion to each shareholder's existing shareholding, usually at a price deeply discounted to that prevailing in the market.

Secondary Market
Marketplace for trading in existing securities.

Securities
Bonds and equities.

Shares
Shares are the equity capital of a company, hence the reason they are referred to as equities. They may comprise ordinary shares and preference shares or may be referred to as common shares or preferred stock.

Share Capital
The nominal value of a company's equity or ordinary shares. A company's authorised share capital is the nominal value of equity the company may issue, while issued share capital is that which the company has issued. The term share capital is often extended to include a company's preference shares.

Special Resolution
Proposal put to shareholders requiring 75% of the votes cast.

Spread
Difference between a buying (bid) and selling (ask or offer) price.

Swap
An OTC derivative whereby two parties exchange a series of periodic payments based on a notional principal amount over an agreed term. Swaps can take the form of interest rate swaps, currency swaps and equity swaps.

Takeover
When one company buys more than 50% of the shares of another.

Tokenisation
Tokenisation is the process of converting any rights or assets into a digital token that can then be used, owned and transferred by the holder through a blockchain without the need for a third-party intermediary.

Unit Trust
A system whereby money from investors is pooled together and invested collectively on their behalf into an open-ended trust.

Writer
Party selling an option. The writers receive premiums in exchange for taking the risk of being exercised against.

Yield
Income from an investment as a percentage of the current price.

Yield Curve
The depiction of the relationship between the yields and the maturity of bonds of the same type.

Zero Coupon Bonds (ZCBs)
Bonds issued at a discount to their nominal value that do not pay a coupon, but which are redeemed at par on a pre-specified future date.

Multiple Choice Questions

The following questions have been compiled to reflect as closely as possible the standard that you will experience in your examination. Please note, however, they are not actual exam questions.

Tick one answer for each question. When you have completed all questions, refer to the end of this section for the answers.

1. Which of the following is a monetary policy tool that a central bank would use to manage the economy?

A. Altering tax rates
B. Reducing welfare payments
C. Increasing government spending
D. Changing interest rates

2. Holding assets in safekeeping is one of the principal activities of which of the following?

A. Custodian bank
B. International bank
C. Investment bank
D. Retail bank

3. What is the potential impact of increasing levels of government spending?

A. A decrease in the amount of government bonds issued
B. Falling levels of inflation
C. Reduction in the amount of outstanding government debt
D. Rising levels of inflation

4. Which of the following statements concerning call and put options is true?

A. The buyer of a call has the right to sell an asset
B. The buyer of a put has the right to buy or sell an asset
C. The seller of a call has the right to sell an asset
D. The buyer of a call has the right to buy an asset

5. In which type of foreign exchange (FX) transaction would the rate be agreed today for a transaction occurring at a later date?

A. Forward
B. Future
C. Spot
D. Swap

6. Which of the following is normally traded in the money markets?

A. Treasury bill
B. Treasury gilt
C. Treasury note
D. Treasury stock

7. If there is expected to be a period of declining interest rates, which mortgage payment terms are likely to be least favourable?

A. Capped rate
B. Discounted rate
C. Fixed rate
D. Variable rate

8. In the event of a company going into liquidation, which of the groups below would normally have the lowest priority for payment?

A. Creditors
B. Bondholders
C. Ordinary shareholders
D. Preference shareholders

9. Which of the following is a function normally undertaken by a central bank?

A. Acting as banker to banks
B. Lending to commercial companies
C. Setting tax rates
D. Operating stock markets

10. Which of the following is true of corporate bonds?

A. They have market risk and default risk
B. They have market risk, but no default risk
C. They have default risk, but no market risk
D. They have neither market risk nor default risk

11. Which of the following is hoping for the price of an asset to fall?

A. The holder of a call option
B. An investor who is long a future
C. The writer of a put option
D. An investor who is short a future

12. Which of the following types of US government security is a zero coupon instrument?

A. Treasury note
B. Treasury bond
C. TIPS (treasury inflation-protected securities)
D. Treasury bill

13. If a trader deliberately gives the misleading impression that demand for a particular share is greater than it really is, this type of behaviour is likely to be classed as:

A. front running
B. product churning
C. money laundering
D. market abuse

14. If a credit card company quotes its interest rate as 20% pa, charged half-yearly, what is the effective annual rate?

A. 20%
B. 21%
C. 22%
D. 23%

15. A policy that only pays out if death occurs during the term of the policy is:

A. an endowment plan
B. term assurance
C. an income replacement plan
D. whole-of-life assurance

16. The equity markets of which of the following countries are represented by an index called the SSE Composite?

A. Korea
B. Japan
C. China
D. India

17. What is the corporate equivalent of a Treasury bill known as?

A. Supranational bond
B. Commercial paper
C. Structured product
D. Certificate of deposit

18. How are investment trust shares usually purchased?

A. By application to CREST
B. Direct from the trust manager
C. Through an ACD
D. On the stock market

19. Which world stock market still operates using a quote-driven system?

A. LSE
B. Euronext
C. NASDAQ
D. NYSE

20. An airline establishes an agreement via an exchange-traded instrument with an oil company to pay a specific price in three months' time for a specific quantity of fuel at that time. This type of agreement is normally called:

A. an option
B. a future
C. a swap
D. a warrant

21. An investor purchases a holding of US$10,000 in 1.955% Treasury bonds at a price of $95. What is the value of the holding?

A. $100,000
B. $95,000
C. $9,500
D. $10,000

22. Which of the following types of financial instrument is normally covered by the insider dealing rules?

A. Options on agricultural products
B. Futures on energy products
C. Technology shares
D. OEIC shares

23. TIPS are an example of which type of government bond?

A. Conventional
B. STRIP
C. Index-linked
D. Ultra-long

24. You have a holding of £10,000 5% Treasury Stock 2025, which is currently priced at £112, and on which you receive half-yearly interest of £250. Which of the following is its flat yield?

A. 4.44%
B. 4.46%
C. 4.48%
D. 4.50%

25. Which of the following is most likely to be an example of an over-the-counter (OTC) derivative?

A. Covered warrant
B. Future
C. Option
D. Swap

26. A fund that aims to mimic the performance of an index deploys which type of investment style?

A. Contrarian
B. Growth
C. Passive
D. Thematic

27. Which of the following is an example of a discount instrument?

A. Commercial paper
B. Commercial property
C. Money market account
D. Money market fund

28. Fonds Commun de Placements are a type of:

A. collective investment scheme
B. money market instrument
C. agricultural commodity product
D. life assurance policy

29. Which of the following events is the best example of a mandatory corporate action with options?

A. Scrip issue
B. Takeover bid
C. Dividend payment
D. Rights issue

30. Which of the following products track the performance of an index?

A. ETF
B. Investment trust
C. SICAV
D. Unit trust

31. A private equity fund will use which of the following types of structure?

A. OEIC
B. Investment trust
C. Limited partnership
D. Trust

32. On what day would a share price normally be expected to fall by the amount of the dividend?

A. Record day
B. Ex-dividend day
C. Dividend payday
D. Dividend declaration date

33. A company has in issue 20 million ordinary shares of 50p nominal, originally issued at a price of £2 and currently trading at £4. It has a 1:2 capitalisation issue. How much cash will the company receive as a result of this issue?

A. Nil
B. £10 million
C. £20 million
D. £40 million

34. With which trade body would you associate the trading of OTC derivatives?

A. ICMA
B. ISDA
C. SWIFT
D. TRAX

35. With what type of activity would you associate a multilateral traded facility (MTF)?

A. Agreement of forward derivative trades
B. Currency speculation
C. Risk-sharing insurance
D. Trading equities and bonds

36. What type of corporate action would have taken place if an existing shareholder purchased new shares in the company, thereby increasing the total shares issued?

A. Bonus issue
B. Capitalisation issue
C. Rights Issue
D. Scrip Issue

37. Which of the following is the legal owner of the assets of a unit trust?

A. ACD
B. Depository
C. Manager
D. Trustee

38. All of the following are true of the differences between money market and capital market instruments except:

A. capital market instruments are traded and settled via exchanges, and money market instruments are not

B. money market instruments are usually held for a shorter term than capital market instruments

C. money market instruments are all bearer instruments, whereas capital market instruments are more usually uncertificated and registered

D. the money markets have a high minimum subscription level and are not suitable for private investors to invest in directly

39. When an annual general meeting (AGM) includes a proposal to change the company's constitution, what minimum proportion of votes is normally required to carry it through?

A. 51%

B. 67%

C. 75%

D. 90%

40. The key difference between the primary market and the secondary market is that:

A. the primary market relates to equities and the secondary market relates to bonds

B. the primary market covers regulated and protected activities and the secondary market covers unregulated and unprotected activities

C. the primary market is where new shares are first marketed and the secondary market is where existing shares are subsequently traded

D. the primary market involves domestic trading and the secondary market involves overseas trading

41. A bond with a coupon of 5%, redeemable in 2025, is currently trading at US$80 per US$100 nominal. What would be the impact on the flat yield if the price increases by US$5?

A. It would rise from 5.88% to 6.25%

B. It would rise from 6.25% to 6.75%

C. It would fall from 6.25% to 5.88%

D. It would fall from 6.75% to 6.25%

42. What term is used to describe a situation where a trader has committed to buy, and is currently holding, a future which has two weeks until the specified future date?

A. Call
B. Put
C. Long
D. Short

43. A money launderer is actively switching funds between products. At what stage of money laundering would you expect to see this?

A. Investment
B. Integration
C. Layering
D. Placement

44. 70% of a fund's assets are indexed to the S&P 500 and the balance is actively managed. This type of investment approach is normally known as:

A. controlled growth management
B. momentum investment management
C. core satellite management
D. differential strategy management

45. Which of the following types of investment vehicle is most likely to be highly geared?

A. Hedge funds
B. Real estate investment trusts
C. Unit trusts
D. Open-ended investment companies

46. A company has 10 million ordinary shares in issue with a market price of $1.50 each. If the company pays a total dividend of $2 million, what would the dividend yield be?

A. 2%
B. 13%
C. 15%
D. 20%

47. What is the likely effect of inflation?

A. Borrowers can be expected to suffer during a period of inflation
B. Incomes that increase in line with inflation will pay less tax
C. Lenders will receive a higher value in real terms on redemption of debts
D. Fixed income returns will suffer during a period of inflation

48. When a client uses an *ijara* arrangement to borrow money to acquire a property, what proportion of the property will the bank normally buy at outset?

A. None
B. A variable amount between 10% and 25%
C. 50%
D. 100%

49. Which of the following types of life assurance policy has a significant investment element?

A. Level term
B. Increasing term
C. Family income benefit
D. Whole-of-life

50. How can 'hedging' be defined?

A. Ensuring that all trades are settled on a delivery versus payment basis
B. Spreading an investment portfolio across a wide range of industries and/or countries
C. The purchase or sale of a commodity, security or other financial instrument for the purpose of offsetting the profit or loss of another security
D. Using a central counterparty to mitigate credit risk

Answers to Multiple Choice Questions

1. D Chapter 2, Section 3.3 and 3.4

Monetary policy is the regulation of the economy through control of the monetary system by operating on such variables as the money supply, the level of interest rates and the conditions for the availability of credit.

Fiscal policy is any action by the government to spend money, or to collect money in taxes, with the purpose of influencing the condition of the economy.

2. A Chapter 1, Section 3.2

The primary role of a custodian is the safekeeping of assets.

3. D Chapter 2, Section 5.1

Excessive government spending can bring about an increase in inflation.

4. D Chapter 6, Section 3.3

A call option is when the buyer has the right to buy the asset at the exercise price.

5. A Chapter 5, Section 3.2

In a forward transaction, money does not actually change hands until some agreed future date. A buyer and seller agree on an exchange rate for any date in the future, for a fixed sum of money, and the transaction occurs on that date, regardless of what the market rates are then. The duration of the trade can be a few days, months or years.

6. A Chapter 5, Section 2

Treasury bills are normally traded in the money markets. They are usually issued weekly by or on behalf of governments and the money is used to meet the government's short-term borrowing needs.

7. C Chapter 9, Section 3.3

In a fixed rate mortgage, the borrower's interest rate is set for an initial period, usually the first three or five years. If interest rates fall and perhaps stay low, the fixed rate loan can only be cancelled if a redemption penalty is paid.

8. C Chapter 3, Section 1.2

If a company closes down, often described as the company being 'wound up', the ordinary shareholders are paid after everybody else. If there is nothing left, then the ordinary shareholders get nothing.

9. A Chapter 2, Section 4.1

Central banks typically act as bankers to the banking system.

10. A Chapter 4, Section 2.2.3

There is a possibility that the issuer will not repay the capital at maturity (ie, default risk) and the bond's value can be influenced by interest rate changes (ie, market risk).

11. D Chapter 6, Section 2.3

Being short means selling. An investor who is selling a call option may be forced to make a future sale to the option buyer at a price agreed today, so they hope the actual price will fall.

12. D Chapter 4, Section 3.1

Treasury bills do not pay interest, but instead are issued at a discount to par.

13. D Chapter 8, Section 3.2

Market abuse may arise in circumstances where investors have been unreasonably disadvantaged by others, and one example relates to giving a false or misleading impression of the supply, demand or value of a particular investment.

14. B Chapter 9, Section 2.2

20% divided by 2 = 10%, expressed as 0.10

1 + 0.10 = 1.10

1.102 = 1.10 x 1.10 = 1.21

1.21 – 1 = 0.21 x 100 = 21%

15. B Chapter 9, Section 4.1.2

Term assurance is designed to pay out only if death occurs within a specified period.

16. C Chapter 3, Section 7

SSE Composite is the main index of China.

17. B Chapter 5, Section 2

Commercial paper is issued by companies and is effectively the corporate equivalent of a Treasury bill.

18. D Chapter 7, Section 3.4

Like other listed company shares, shares in investment trust companies are bought and sold on stock exchanges.

19. C Chapter 3, Section 6

NASDAQ operates a quote-driven trading system.

20. B Chapter 6, Section 2.2

A future is an agreement between a buyer and seller whereby the buyer agrees to pay a pre-specified amount for the delivery of a particular quantity of an asset at a future date.

21. C Chapter 4, Section 2.1

The investor purchases $10,000 worth of Treasury bonds at a price of $95. The value of the stock is calculated by multiplying the nominal amount of the stock by the current price (allowing for the price being per $100 nominal of stock), and so the holding has a market value of $9,500 – that is, the nominal value of $10,000 multiplied by the price of $95.

22. C Chapter 8, Section 3.1

Of the financial instruments listed, only futures and options on securities are covered by the insider trading rules. Collectives are not covered by the insider trading rules.

23. C Chapter 4, Section 3.1

TIPS means treasury inflation-protected securities and, therefore, are a type of index-linked US government bond that will guard against the risk posed by inflation.

24. B Chapter 4, Section 7

The flat yield is calculated by taking the annual coupon and dividing by the bond's price, and then multiplying by 100 to obtain a percentage. So, the calculation is (5 ÷ 112) x 100 = 4.46%.

25. D Chapter 6, Section 4

A swap is a type of OTC derivative.

26. C Chapter 7, Section 1.2.1

A passive fund aims to generate returns in line with a chosen index or benchmark.

27. A Chapter 5, Section 2

Commercial paper and Treasury bills are zero coupon and issued at a discount to their par value.

28. A Chapter 7, Section 2.2.1

FCPs are a type of European investment scheme similar to unit trusts, but based on a contract between the scheme manager and the investors.

29. D Chapter 3, Section 3

A mandatory corporate action with options is an action that has some sort of default option which will occur if the shareholder does not intervene, such as a rights issue.

30. A Chapter 7, Section 4

An exchange-traded fund (ETF) is an investment fund which is usually designed to track a particular index.

31. **C** **Chapter 7, Section 5.2**

Private equity arrangements are usually structured in different ways from retail collective investment schemes. They are usually set up as limited partnerships with high minimum investment levels.

32. **B** **Chapter 3, Section 3.2.5**

The share price normally falls on the ex-dividend day.

33. **A** **Chapter 3, Section 3.2.3**

A capitalisation issue involves distributing bonus shares, so there is no need to subscribe any further funds.

34. **B** **Chapter 1, Section 3.13**

The International Swaps and Derivatives Association (ISDA) is the trade body for investment institutions that trade OTC derivatives.

35. **D** **Chapter 3, Section 6**

A multilateral trading facility (MTF) is an alternative method for trading equities and bonds rather than through a traditional stock exchange.

36. **C** **Chapter 3, Section 3.2.1**

Under a rights issue, a shareholder is offered the right to subscribe for further 'new' shares at a fixed price per share.

37. **D** **Chapter 7, Section 2.2.2**

The trustee is the legal owner of the assets in the trust, holding the assets for the benefit of the underlying unitholders.

38. **A** **Chapter 5, Section 2**

Settlement of money market instruments is typically achieved through the same settlement system that is used for equities and bonds, and many money market instruments, such as certificates of deposit, can be bought and sold in the same way as shares. All the other statements are true.

39. **C** **Chapter 3, Section 3.3**

Changes to a company's constitution are normally deemed to be a special resolution which requires at least 75% to vote in favour.

40. **C** **Chapter 3, Section 4**

The primary market is where new shares in a company are marketed for the first time. When these shares are subsequently resold, this is normally done on the secondary market.

41. C Chapter 4, Section 7

The yield would change from (5 ÷ 80) x 100 = 6.25% to (5 ÷ 85) x 100 = 5.88%.

42. C Chapter 6, Section 2.3

'Long' is the term used for the position taken by the buyer of a future.

43. C Chapter 8, Section 2.1

Layering is the second stage and involves moving the money around in order to make it difficult for the authorities to link the placed funds with the ultimate beneficiary of the money.

44. C Chapter 7, Section 1.2.3

Index trackers and actively managed funds can be combined in what is known as core satellite management.

45. A Chapter 7, Section 5.1

Many hedge funds can borrow funds and use derivatives to potentially enhance returns.

46. B Chapter 3, Section 1.4

Dividend per share = $2,000,000 / 10,000,000 = $0.20

Dividend yield = $0.20 / $1.50 = 13%

47. D Chapter 2, Section 5.1

Inflation erodes the value of money and so those on fixed incomes suffer.

48. D Chapter 9, Section 3.4

Under the *ijara* system the bank, rather than the borrower, buys the property and, at the end of the rental period (usually 25 years), ownership is transferred to the customer.

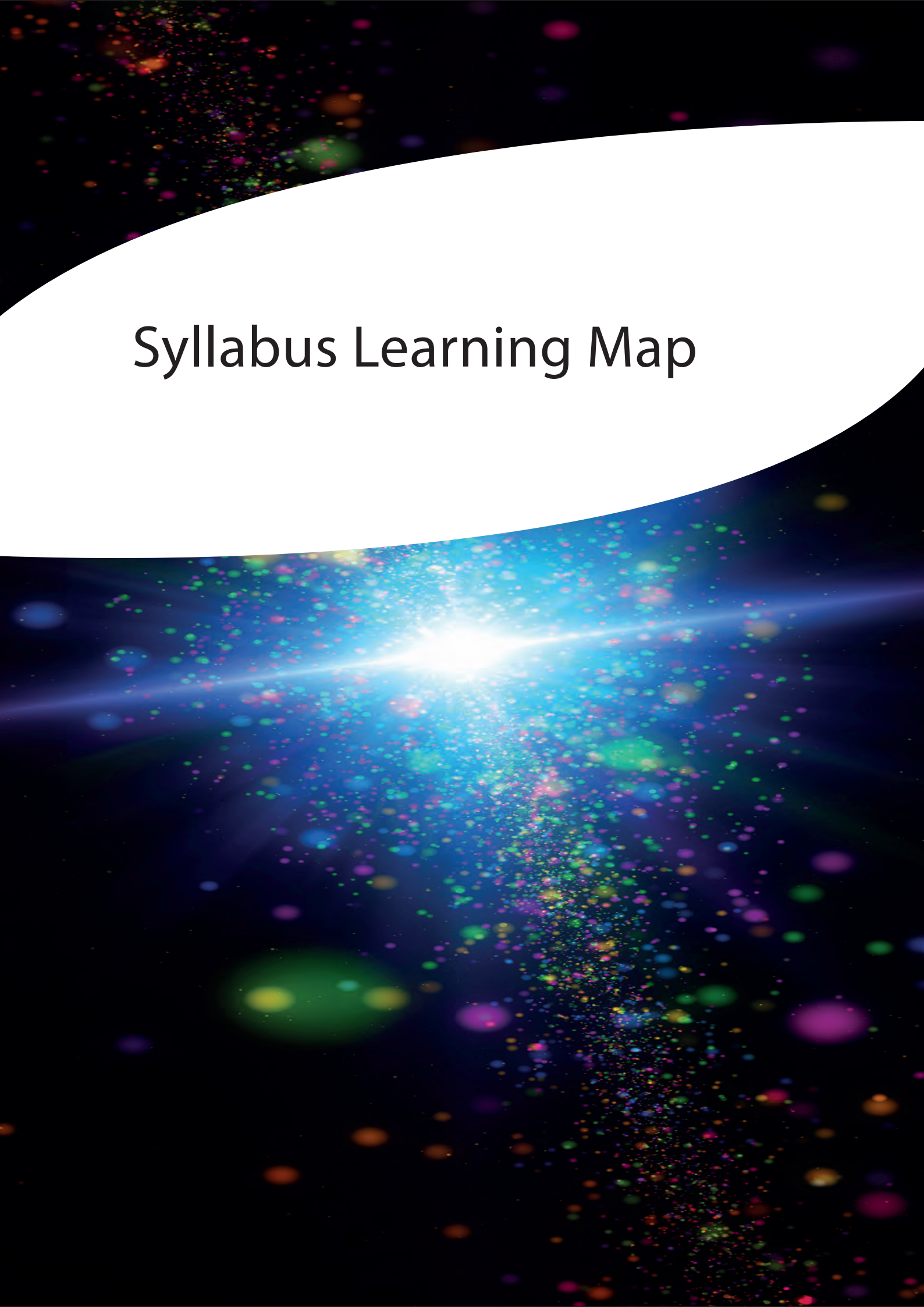
49. D Chapter 9, Section 4.1.1

Whole-of-life policies are investment-based policies.

50. C Chapter 6, Section 1.1

Hedging involves buying or selling an instrument in order to hedge against the profit or loss on another security.

Syllabus Learning Map



Syllabus Unit/ Element		Chapter/ Section

Element 1	Introduction	Chapter 1
1.1	**The Financial Services Sector** On completion, the candidate should:	
1.1.1	Know the role of the following within the financial services sector: • retail banks/commercial banks • savings institutions • investment banks • private banks • pension funds • insurance companies • fund managers • stockbrokers • custodians • platforms • third-party administrators (TPAs) • industry trade and professional bodies • sovereign wealth funds • peer-to-peer/crowdfunding	3
1.1.2	Know the function of and differences between retail and professional/commercial business and who the main customers are in each case	2
1.1.3	Know the role of investment distribution channels including: • independent and restricted advice • execution only	4
1.1.4	Know the impact of fintech on financial markets, including robo advice and peer to peer crowdfunding	4
1.1.5	Understand the approaches to Environmental, Social, and Governance (ESG) investment, and their advantages and disadvantages	5

Syllabus Unit/ Element		Chapter/ Section
Element 2	**Economic Environment**	**Chapter 2**
2.1	**The Economic Environment** On completion, the candidate should:	
2.1.1	Know the factors which determine the level of economic activity: • state-controlled economies • market economies • mixed economies • open economies	2
2.1.2	Know the stages of the economic cycle and the role of government in determining: • economic policy • fiscal policy • monetary policy	3
2.1.3	Know the function of central banks: • Federal Reserve • European Central Bank • Bank of England • Bank of Japan	4.1
2.1.4	Understand the impact of the following economic data: • Gross Domestic Product (GDP) • balance of payments • budget deficit/surplus • level of unemployment • exchange rates • inflation/deflation	5

Element 3	Equities/Stocks	Chapter 3
3.1	**Equities/Stocks** On completion, the candidate should:	
3.1.1	Know how a company is formed and the differences between private and public companies	1
3.1.2	Know the features and benefits of ordinary and preference shares/common stock and preferred stock: • dividend • capital gain • share benefits • right to subscribe for new shares • right to vote	1

Syllabus Unit/ Element		Chapter/ Section
3.1.3	Be able to calculate the share dividend yield	1
3.1.4	Understand the advantages, disadvantages and risks associated with owning shares/stock: • price risk • liquidity risk • issuer risk • foreign exchange risk	2
3.1.5	Know the definition of a corporate action and the difference between mandatory, voluntary and mandatory with options, including takeovers and mergers	3
3.1.6	Understand the following terms: • bonus/scrip/capitalisation issues/stock splits/reverse stock splits • rights issues/open offer • dividend payments • buybacks	3.2
3.1.7	Be able to calculate: • theoretical ex-rights price • theoretical ex-bonus price	3.2
3.1.8	Know the purpose and format of annual general meetings	3.3
3.1.9	Know the function of a stock exchange: • primary/secondary market • listing	4
3.1.10	Understand the characteristics of depositary receipts: • American depositary receipt • global depositary receipt • dividend payments • how created/pre-release facility • rights	5
3.1.11	Know the types and uses of the main global stock exchange indices	7
3.1.12	Know how shares are traded: • on-exchange/over-the-counter • multilateral trading facilities • order-driven/quote-driven	6
3.1.13	Know the method of holding title and related terminology: registered and bearer; immobilised and dematerialised	8
3.1.14	Understand the role of the central counterparty in clearing and settlement	8

Syllabus Unit/ Element		Chapter/ Section
3.1.15	Understand how settlement takes place: • participants • process • settlement cycles	8

Element 4	Bonds	Chapter 4
4.1	**Characteristics** On completion, the candidate should:	
4.1.1	Understand the characteristics and terminology of bonds: • coupon • redemption • nominal value • yields	2.1
4.2	**Government Bonds**	
4.2.1	Know the definition and features of government bonds: • types • US • UK • China • Germany • Japan	3
4.3	**Corporate Bonds** On completion, the candidate should:	
4.3.1	Know the definitions and features of the following types of bond: • domestic • foreign • eurobond • asset-backed securities including covered bonds • zero coupon • hybrids (convertible/preferred) • floating rate notes • medium term notes	4, 5, 6
4.4	**Bonds** On completion, the candidate should:	
4.4.1	Know the potential advantages and disadvantages of investing in different types of bonds	2.2
4.4.2	Be able to calculate the flat yield of a bonds	7
4.4.3	Understand the role of credit rating agencies and the difference between investment and non-investment grades	2.3

Syllabus Unit/ Element		Chapter/ Section
Element 5	**Other Markets and Investments**	**Chapter 5**
5.1	**Cash Deposits** On completion, the candidate should:	
5.1.1	Know the characteristics of fixed-term and instant access deposit accounts	1
5.1.2	Know the advantages and disadvantages of investing in cash	1
5.1.3	Know the differences between cryptocurrencies and fiat currencies	1
5.2	**The Money Market** On completion, the candidate should:	
5.2.1	Know the difference between a capital market instrument and a money market instrument	2
5.2.2	Know the definition and features of the following: • treasury bill • commercial paper • certificate of deposit • money market funds	2
5.2.3	Know the advantages and disadvantages of investing in money market instruments	2
5.3	**Property** On completion, the candidate should:	
5.3.1	Know the characteristics of property investment: • commercial/residential property • direct/indirect investment	4
5.3.2	Know the potential advantages and disadvantages of investing in property	4
5.4	**The Foreign Exchange Market** On completion, the candidate should:	
5.4.1	Know the basic structure of the foreign exchange market including: • currency quotes • settlement • spot/forward • short-term currency swaps	3
5.4.2	Be able to calculate a forward exchange rate using the interest rate parity formula	3

Syllabus Unit/ Element		Chapter/ Section

Element 6	Derivatives	Chapter 6
6.1	**Derivatives Uses** On completion, the candidate should:	
6.1.1	Know the uses and application of derivatives	1.1
6.2	**Futures** On completion, the candidate should:	
6.2.1	Know the definition and function of a future	2
6.3	**Options** On completion, the candidate should:	
6.3.1	Know the definition and function of an option	3
6.3.2	Understand the following terms: • calls • puts	3
6.4	**Terminology** On completion, a candidate should:	
6.4.1	Understand the following terms: • long • short • open • close	2
	• holder • writing • premium • covered • naked	3
6.5	**Derivatives/Commodity Markets** On completion, the candidate should:	
6.5.1	Know the characteristics of the derivatives and commodity markets	6
6.5.2	Know the potential advantages and disadvantages of investing in the derivatives and commodity markets	7
6.6	**Swaps** On completion, the candidate should:	
6.6.1	Know the definition and function of interest rate swaps	4

Syllabus Unit/ Element		Chapter/ Section
6.7	**Credit Default Swaps (CDSs)** On completion, the candidate should:	
6.7.1	Know the definition and function of credit default swaps	5

Element 7	Investment Funds	Chapter 7
7.1	**Introduction** On completion, the candidate should:	
7.1.1	Understand the potential advantages, disadvantages, and risks of collective investment	1.1
7.1.2	Know the difference between active and passive (eg, index) management	1.2
7.1.3	Know the types of funds and how they are classified	1.2
7.2	**Open-Ended/Mutual Funds** On completion, the candidate should:	
7.2.1	Know the characteristics and different types of open-ended fund/mutual fund: • US • Europe	2
7.3	**Closed-Ended Investment Companies** On completion, the candidate should:	
7.3.1	Know the characteristics of closed-ended investment companies: • share classes • gearing • real estate investment trusts (REITs)	3
7.3.2	Know the meaning of the discounts and premiums in relation to the pricing of closed-ended investment companies	3
7.3.3	Know how closed-ended investment companies' shares are traded	3
7.4	**Exchange-Traded Funds (ETFs)** On completion, the candidate should:	
7.4.1	Know the main characteristics of exchange-traded funds: • trading • replication methods • synthetic/non-synthetic	4

Syllabus Unit/ Element		Chapter/ Section
7.5	**Alternative Investment Funds (AIFs)** On completion, the candidate should:	
7.5.1	Know the basic characteristics of hedge funds: • risks • cost and liquidity • investment strategies	5.1
7.5.2	Know the basic characteristics of private equity: • raising finance • realising capital gain	5.2

Element 8	Financial Services Regulation	Chapter 8
8.1	**Introduction** On completion, the candidate should:	
8.1.1	Understand the need for regulation and authorisation of firms	1.1
8.1.2	Understand the main aims and activities of financial services regulators	1.2
8.1.3	Know the Chartered Institute for Securities & Investment (CISI) Code of Conduct	4.1
8.1.4	Understand the key principles of professional integrity and ethical behaviour in financial services	4
8.2	**Financial Crime** On completion, the candidate should:	
8.2.1	Know what money laundering is, the stages involved and the related criminal offences	2.1
8.2.2	Know how firms/individuals can be exploited as vehicles for financial crime: • fraud • cybercrime • terrorist financing	2.1
8.3	**Market Abuse** On completion, the candidate should:	
8.3.1	Know the offences that constitute market abuse including insider dealing, unlawful dissemination of inside information, manipulating market transactions and misleading statements information	3.1

Syllabus Unit/ Element		Chapter/ Section
Element 9	**Other Financial Products**	**Chapter 9**
9.1	**Retirement Planning** On completion, the candidate should:	
9.1.1	Know the benefits provided by pensions	1
9.1.2	Know the basic features and risk characteristics of retirement funds: • state schemes • corporate retirement plans (defined benefit, defined contribution) • personal schemes	1
9.2	**Loans** On completion, the candidate should:	
9.2.1	Know the differences between bank loans, overdrafts and credit card borrowing	2
9.2.2	Know the difference between the quoted interest rate on borrowing and the effective annual rate of borrowing	2.2
9.2.3	Be able to calculate the effective annual rate of borrowing, given the quoted interest rate and frequency of payment	2.2
9.2.4	Know the difference between secured and unsecured borrowing	2
9.3	**Mortgages** On completion, the candidate should:	
9.3.1	Understand the characteristics of the mortgage market: • interest rates • loan to value	3
9.3.2	Know the definition of and types of mortgage: • repayment • interest only • offset	3
9.3.3	Know the prohibition on interest and the types of mortgage contracts that exist in Islamic finance	3.4
9.4	**Life Assurance** On completion, the candidate should:	
9.4.1	Know the basic principles of life assurance and the definition of the following types of life policy: • term assurance • whole-of-life	4.1

Syllabus Unit/ Element		Chapter/ Section

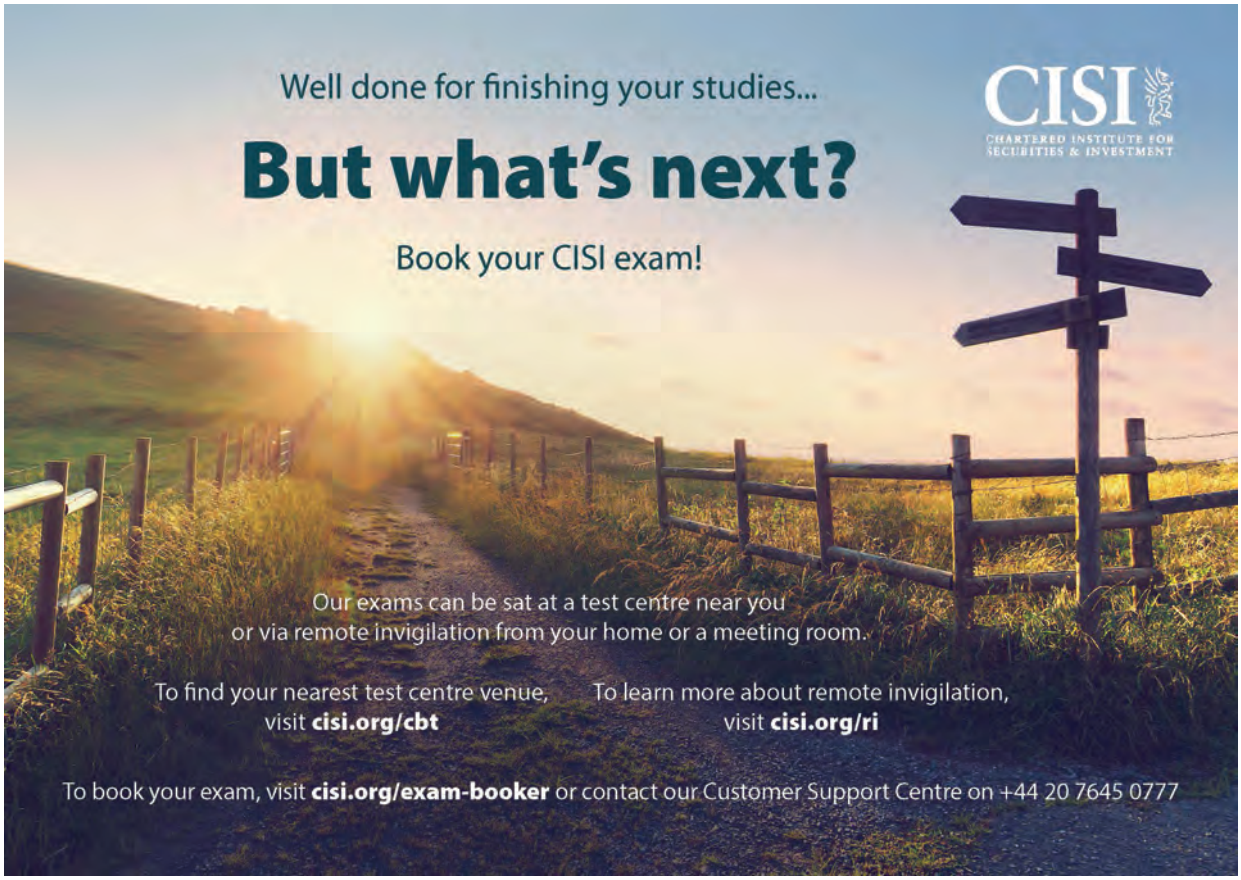
Element 10	Financial Advice	Chapter 10
10.1	**Areas of Financial Advice** On completion, the candidate should:	
10.1.1	Understand the main areas of financial advice: • budgeting • protection • borrowing • investment and saving • later-life planning • estate planning • tax planning and offshore considerations	1
10.2	**Process for Giving Financial Advice** On completion, the candidate should:	
10.2.1	Understand the key factors in the financial advice process: • the client relationship • affordability, suitability, attitude to risk • matching solutions with needs • use of communication skills in giving advice • monitoring and reviewing clients' circumstances • information given to clients • consumer rights and remedies, including awareness of their limitations	3
10.3	**Legal Concepts Relevant in Financial Advice** On completion, the candidate should:	
10.3.1	Understand the key legal concepts relating to: • legal persons (wills/intestacy/personal representatives/ trustees/companies/limited liabilities/partnerships) • contract, capacity to contract • agency • real estate, personal property and joint ownership • powers of attorney • insolvency and bankruptcy • identifying, reporting scams	2

Examination Specification

Each examination paper is constructed from a specification that determines the weightings that will be given to each element. The specification is given below.

It is important to note that the numbers quoted may vary slightly from examination to examination as there is some flexibility to ensure that each examination has a consistent level of difficulty. However, the number of questions tested in each element should not change by more than plus or minus 2.

Element Number	Element	Questions
1	Introduction	3
2	The Economic Environment	4
3	Equities/Stocks	9
4	Bonds	7
5	Other Markets and Investments	5
6	Derivatives	4
7	Investment Funds	6
8	Regulation and Ethics	5
9	Other Financial Products	4
10	Financial Advice	3
Total		**50**


Well done for finishing your studies...
But what's next?
Book your CISI exam!
CISI
CHARTERED INSTITUTE FOR SECURITIES & INVESTMENT
Our exams can be sat at a test centre near you
or via remote invigilation from your home or a meeting room.
To find your nearest test centre venue, visit cisi.org/cbt
To learn more about remote invigilation, visit cisi.org/ri
To book your exam, visit cisi.org/exam-booker or contact our Customer Support Centre on +44 20 7645 0777

CISI
CHARTERED INSTITUTE FOR SECURITIES & INVESTMENT

Enhance your studies with the MyCISI App

As a student member, you can also access all the first-class CPD resources we offer such as Professional Refresher online learning modules, CISI TV videos and more – all in one easy to use app.

Search for MyCISI on the Play Store or App Store.

GET IT ON Google Play

Download on the App Store

How CISI membership will benefit you after your studies

CISI
CHARTERED INSTITUTE FOR SECURITIES & INVESTMENT

Gain a competitive edge with first-class CISI membership benefits. These benefits are enjoyed by over 43,000 professionals across the world and help keep our members on top of their game.

Below are some of the key resources that you can access as part of your student membership. To retain these benefits after your studies, join the CISI as a member.

CISI TV

A selection of our most popular CPD events, interviews, and features, available to watch online, anytime, anywhere.

500+
videos on demand

120,000+
on-demand videos watched last year

CPD, Networking & Social Events

Our in-person and virtual programme offers the hottest topics, expert insight and networking opportunities.

500+
events every year

24
UK Branches and 9 National Advisory Councils who represent local members and guide our offering

Online Learning with Professional Refresher

Our Professional Refresher series offers cutting edge analysis and insight for financial services professionals in bite-sized elearning modules.

200+ unique modules

25,000+ users last year

10 modules updated every month

The Review

Our award-winning members magazine incorporates the latest news, insight and thought leadership affecting your profession, available both online and in print.

100,000+
views online last year

Young Professionals' Network (YPN)

Our YPN was created to help young professionals aged 18-35 harness their competitive edge and professional development skills with a dedicated range of tailored events, resources and guides.

3,000+
members in the CISI Young Professionals Network

Designatory Letters and Badges

Differentiate yourself from your peers with exclusive member badges and designatory letters to showcase your achievements.

Interested in joining our community?

Our membership levels start from Affiliate level, which is available to anyone. Depending on the qualifications you achieve, you may be eligible for our higher-level membership, such as Associate or Full Member. Find out more at **cisi.org/membership**

CISI
CHARTERED INSTITUTE FOR SECURITIES & INVESTMENT

Online Learning

Cutting edge analysis and insight for financial services professionals, available anytime, anywhere

We offer **over 200** elearning modules to help you meet your CPD requirements. Here are some of the modules available. These CISI Professional Refreshers are free to CISI members and accessible to CISI student members.

To find out more about Professional Refresher elearning modules, visit **cisi.org/pr**

Anti-Money Laundering
Understand AML legislation and regulation, the role of the MLRO, and the sanctions and penalties.

Client Assets and Client Money Essentials
Gain an overview of the principles and high-level rules associated with holding and protecting client assets.

Conflicts of Interest
Consider examples of conflicts of interest, tools, policies and procedures, enforcement action, and good practice.

Data Science
Digitisation of business operations has accelerated the speed of data capture. Harness the value of your data.

Diversity and Inclusion
Targeted at those responsible for diversity, equality and anti-discrimination, and those recruiting and managing.

Financial Crime
Gain an overview of insider dealing, market abuse, money laundering, terrorist finance and financial sanctions.

Financial Planning
Gain an overview of the financial planning process, key terms and the regulatory framework that governs it.

Greenwashing
This module explores the key concepts surrounding greenwashing, the wider implications, and the measures being taken to fight it.

Impact Investing
Aim to take ethical and sustainable investment principles a step further through intentional investment.

Integrity and Ethics
Understand ethics in finance, the importance of trust and trustworthiness, and compliance versus ethics.

Market Abuse
Examine offences, penalties, safe harbours, reporting obligations and the relationship with other offences.

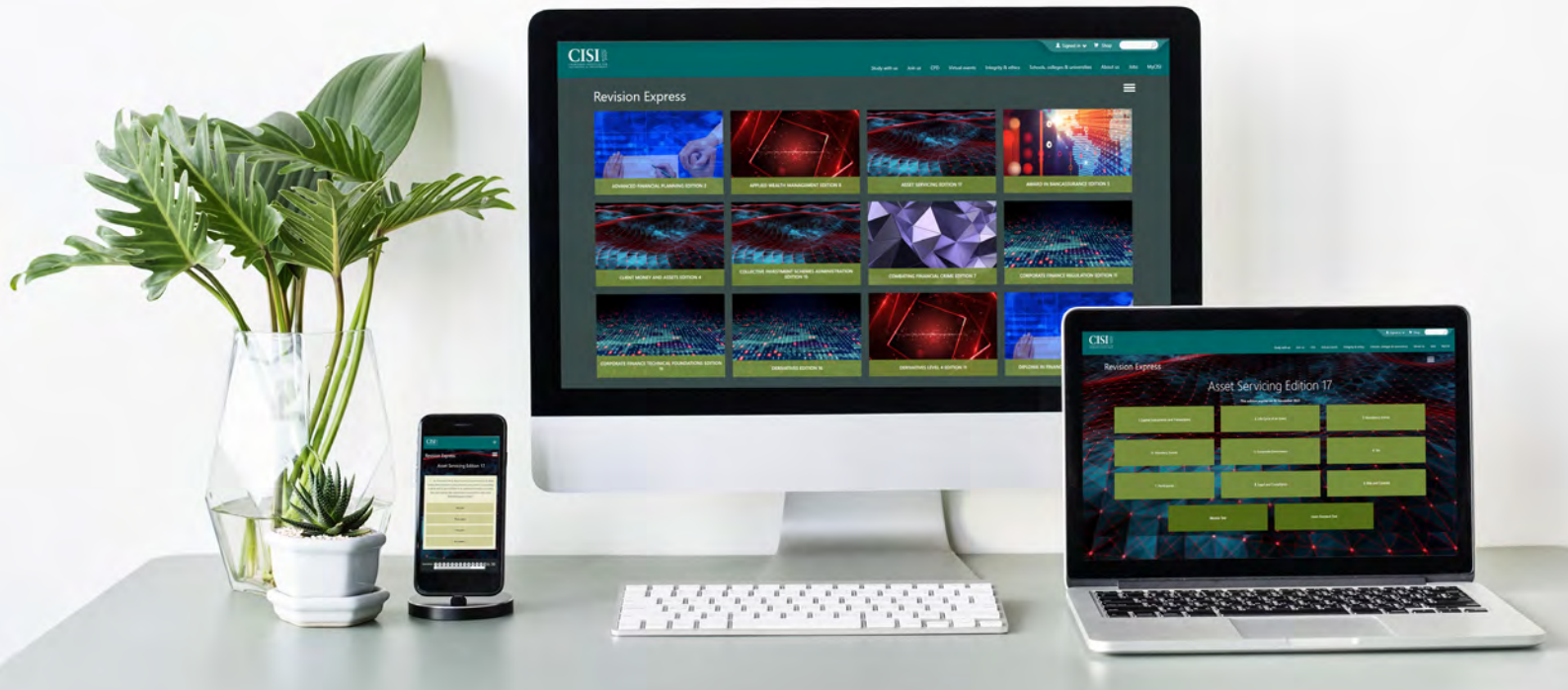
Neuroscience at Work
Learn how to work optimally without harming your health when faced with increased workloads and deadlines.

CHARTERED INSTITUTE FOR SECURITIES & INVESTMENT

Revision Express

Test your knowledge before your exam

Revision Express is an online study tool designed to be used alongside CISI workbooks to prepare you for your exam. It contains a range of questions that aid learning by reaffirming understanding of the subject, and the Sample Exam Standard Test contains questions that have been compiled to reflect as closely as possible the standard that you will experience in your exam.



Key Features

- ✓ Special end-of-module practice exam to reflect as closely as possible the standard you will experience in your exam (please note, however, they are not the CISI exam questions themselves)
- ✓ Questions throughout to reaffirm understanding of the subject
- ✓ Extensive glossary of terms
- ✓ Allows you to study whenever you like, and on any device

To purchase Revision Express

Visit the CISI's online bookshop **at cisi.org/bookshop** or call our Customer Support Centre on **+44 20 7645 0777**

If you have already purchased Revision Express, you can access it via the MyCISI app or MyStudy at **cisi.org/mystudy**

Please note: The questions in Revision Express should not be viewed as sample exam questions as sample papers are available for this purpose.

CISI
CHARTERED INSTITUTE FOR SECURITIES & INVESTMENT

The possibilities are endless with CISI qualifications

Globally recognised qualifications that will allow you to spread your wings in the world of finance.

Enhance your skills, career and personal brand at cisi.org/qualifications